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Working with Violent Clients:

Staff Explanations and Actions

Janice Audrey Leggett

PhD

City University

Department of Psychology

School of Social Sciences

August 2004

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ACKNOWLEDGEMENTS

First and foremost I would like to thank all of the staff who took part in this project. Their willingness to share their experiences made this possible and has enriched my understanding of the practical and emotional issues involved in violent interchanges in the workplace. The untimely death of Huw Gronow, a dedicated and insightful former colleague and participant in this research, has led me to reflect more deeply on the importance of work relationships in people's lives, and I would particularly like to acknowledge his contribution. I would also like to extend my appreciation to the patients who indirectly participated in several of the studies, in that interactions with them were shared with me.

The supervision and guidance provided by my supervisor, Professor Joanne Silvester, has been unstinting and invaluable. Realising her value, I have pursued her from university to university over the years. So enjoyed the trips to Cornwall that I spun the whole thing out for as long as possible...

Much practical help and good humour has been given to me by Grant Davis, Shamim Dinani, Jock Glasheen, Rosemary Greenwood, Stan Scarisbrick, and Hazel Taylor. I would also like to thank Andy Bilson, Jayne Evans, Dawn Fisher, Wendy Goodman, Ann James, Jeremy Tudway and, in particular, Michelle New, for their practical and emotional support, and their friendship.

Thanks too to my parents, David and Jean Leggett, without whom I could not have begun, continued or (they think) completed...and to my siblings for their general discouragement!

Finally, thanks to Dandy for rescuing me.

Declaration

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ABSTRACT

The series of studies presented in this thesis test an attribution-emotion-behaviour model of helping versus violent retaliation (after Weiner, 1995) in professional groups at high risk of encountering violence in the workplace. Weiner's model predicts that staff who perceive violent incidents as within the control of the client will be more likely to experience anger and demonstrate a retaliatory response. Conversely, staff perceiving causes as uncontrollable by the client are more likely to feel sympathetic and exhibit helping behaviour. Emotional responses are seen to mediate between attributions and behavioural responses. A direct link between attributions of control and behaviour is also proposed. These predictions are tested in relation to violent incidents encountered by nursing staff working with detained patients in a psychiatric secure unit, and police firearms officers' in shoot-don't shoot training scenarios.

Previous research investigating healthcare staff's perceptions of the causes of challenging patient behaviour reports mixed support for Weiner's (1995) model. Such research could be criticized for its' almost total reliance on the use of hypothetical scenarios, questionnaire methods, and lack of attention to the potential influence of client gender. The studies presented here are unique in that they not only assess spontaneous attributions and reported emotions of staff concerning their management of actual violent incidents, but also take gender into account. An initial pilot was followed by three studies, the first two of these included samples of healthcare staff working with detained patients in a secure unit, whilst the third examined firearms officers in training. The Leeds Attributional Coding System (LACS) was used to code 1) attributions made by healthcare staff in documentation concerning physical restraint of patients, 2) verbatim transcripts of interviews concerning real violent incidents in which heathcare staff had been involved, and 3) firearms officer debriefing interviews following simulated shoot-don't shoot scenarios.

The findings from the first two studies suggest that different cognitive processes operate dependent on the gender of the client. In terms of the model tested, the proposed direct association between attributions of control and behaviour was supported, but for males only. Thus, where males were concerned, perceiving the client to have high control was associated with retaliation, and perceiving them to have low control was associated with helping. The role of emotion as a mediator was not supported for males or females. Some further support for the direct relationship between attributions of control and behaviour was found in the third study; police firearms officers' perceptions of high control for suspect were associated with increased frequency of shooting.

It is concluded that attributions for client behaviour should be investigated in context, with consideration given to gender. Attributional models of helping/retaliation cannot be applied rigidly across different groups; it is necessary to consider the nature of the population and the circumstances under consideration. Possible explanations of the gender differences found are discussed.

CHAPTER ONE

Introduction

Today's workers are often confronted with conflict situations at work. These include having to deal with the anxieties and frustrations of co-workers, organisational problems, personality clashes, aggressive intruders, and difficult relationships with clients and the public (Chappell & Di Martino, 2000). Media reports of rare and extreme incidents have brought the subject of workplace violence to the forefront of the public's attention. The shootings at Dunblane Primary School on 13th March 1996, in which one teacher and 15 children were killed and a further three teachers and 14 pupils were injured by a gunman, is one such example (Cullen, 1996). The September 11th 2001 terrorist destruction of the World Trade Center in New York, which resulted in the deaths of almost three thousand workers, is another example (Witternborn, 2002). Violence in the workplace is not always so shocking or devastating, however, and may not result in actual bodily harm being inflicted on workers. There is an important need to consider psychological as well as physical violence when investigating workplace violence as the former can have a significant impact on the well-being of employees. In July 2002, for example, the Royal Mail completed its largest ever internal investigation which examined the events leading up to the suicide of a postal worker, Jermaine Lee, in 1999 (Press Association, 2002). It was concluded that the harassment and bullying that Jermaine endured at work contributed to his decision to take his own life.

Violence in the workplace may have wide ranging consequences for individuals, groups, organisations and communities. Perhaps the most obvious result to workers is the infliction of physical injury. Indeed, in terms of the physical consequences of violence at work, just over two-fifths (42%) of all assaults result in some type of injury (Upson, 2004). Being the victim of violence however, has implications not only for the physical well-being of staff, but also for their psychological health. Workers in professions at highest risk of experiencing a violent incident are more worried about being a victim than those in low risk occupations.

Thirty-six per cent of health and social welfare professionals were very or fairly worried about assaults at work in the 2002/2003 British Crime Survey (Upson, 2004). This can have a knock on effect on the psychological and physical well being of staff even if they have not actually been subject to violence personally. Overall, 0.5% of workers in the survey reported that worrying about being threatened or assaulted had a 'great deal' of impact on their health.

Workplace violence does not only have an impact on the most apparent victim but also upon other individuals such as family members and colleagues. There are also consequences for the organisation in terms of staff retention and morale as well as financial implications. The National Audit Office (2003) calculated the annual direct cost of work-related violent incidents in the NHS to be in the region of £69 million through reduced efficiency, sickness absence, psychological treatment, administration time and so on. The 1998 British Crime Survey (Mirrlees-Black, Budd, Partridge & Mayhew, 1998) estimates that 3.3 million work hours were lost due to violence at work in 1997 and the compensation victims would have liked for the inconvenience totalled £180 million.

It is clear that violence in the workplace, regardless of objective severity, can have severe and profound effects on victims, colleagues, family, friends, the organisation and local communities. These effects have been likened to ripples emanating from stones thrown into water (Chappell & Di Martino, 2000). In light of the serious impact of workplace violence there is now not only pressure to ensure the safety of staff from violent members of the public, but also to identify and deal with any potentially problematic staff. Staff are not only victims of violence in the workplace; they may also take on the role of perpetrators of such violence. This is an issue which is often overlooked in the literature in this area which has an overwhelming emphasis on staff as victims (Bowie, 2002). Failure to adequately vet staff who subsequently behave in a violent manner could lead to claims of negligence against employers from other staff and

clients, for not providing a safe environment (Chappell & Di Martino, 2000).

This thesis is concerned with violent encounters between staff and clients. It examines the applicability of Weiner's (1995) attribution-emotion-behaviour model in relation to situations of conflict between worker and client in professions at high risk of encountering violence at work: psychiatric nursing staff working with patients in conditions of medium security, and police firearms officers.

CHAPTER TWO

Literature Review: Violence in the Workplace – Definitions, Prevalence, and High Risk Professional Groups

2.1 Introduction

Despite there being a wealth of literature concerning aggression and violence, perhaps surprisingly, there are no universally accepted definitions of these terms. What constitutes the 'workplace' is also not as straightforward as it might appear. Consideration of definitional issues is therefore an essential starting point for this thesis. Following this, the prevalence of workplace violence will be addressed before going on to consider two professional groups at particularly high risk of encountering violence at work: nurses and police officers. Particular attention will be paid to consumer-related violence i.e. violence between staff and consumers, clients, and/or patients, as this is the focus of this thesis.

2.2 Aggression, violence, and the workplace: some definitional issues

There is much debate in the literature about the definition of violence and the distinction, if any, between this and aggression. The lack of consistency in this area means that we cannot always be sure what is meant if a person is described as 'aggressive' or 'violent'. Some researchers have chosen to define aggression as 'any form of behaviour that is intended to injure someone physically or psychologically' and violence as an extreme example of aggression involving the attempt to cause 'serious physical injury' (e.g. Berkowitz, 1993). Some suggest that whether or not the 'target' is motivated to avoid harm is also important, thus excluding such practices as sado-masochism from their definitions (e.g. Anderson & Bushman, 2002). Defining aggression and violence in terms of intentions and motivations of 'perpetrator' and 'victim' is problematic however, since each individual perceives these acts in a unique way dependent upon their own personality, history, and skills (Bowie, 2002). Gaining access to these internal processes is not always straightforward for the observer. Thus, if an individual physically assaults

another causing minor injury such as mild bruising, how can we know whether their intent was to cause no injury, minor injury, or serious injury? Even if the person tells us what their intention was, how do we know whether we can rely on their version of events? The individual may be motivated to minimise the incident, for example if admitting that the intention was to inflict severe injury would have adverse consequences for them such as loss of employment. Similarly, the individual may be motivated to exaggerate the level of harm intended, as in the case of a gang member wishing to project a powerful image. In addition, people can lack insight into their motivations for the behaviour.

Defining violence purely in terms of the level of physical impact is also problematic as there is a degree of subjectivity in the experience (Littlechild, 1997). The actual level of physical injury sustained is not necessarily a good indicator of how seriously a person views the event as people are wont to react differently to the same experience (Budd, 1999). There is not a direct correlation between the severity of the physical injury and the subsequent level of psychological distress experienced. In other words, an incident involving a relatively minor injury could cause severe psychological distress in one person but very little in another.

Thus it can be seen that intent, motivation, and level of injury are imprecise ways of defining aggression and violence. In view of the difficulties encountered in defining the terms, some researchers have chosen to abandon them altogether, preferring to use other descriptors such as 'coercive actions' (Tedeschi & Felson, 1994). The argument here is that this is less value laden and has the advantage of including threats and punishments as well as physical force as strategies for gaining compliance or inflicting harm. The use of different terminology for essentially the same thing, and different interpretations of the same terminology can be misleading and confusing.

Another important issue is whether or not to include psychological (in addition to physical) tactics in definitions of aggression and violence. As

noted earlier, some have incorporated this into definitions of aggression (e.g. Berkowitz, 1993). In terms of workplace violence, although attention has traditionally been focused on physical violence, it is now acknowledged that psychological violence, such as verbal threats, harassment and bullying, can also have a profound impact on employees.

The European Commission dispenses with the term 'aggression' when specifically considering *workplace* violence. In order to acknowledge the importance of psychological violence (as well as the range of environments which constitute the workplace), they have proposed the following definition of violence at work:

> *'...incidents where persons are abused, threatened or assaulted in circumstances related to their work involving an explicit or implicit challenge to their safety, well-being and health'*
>
> (Wynne, Clarkin, Cox & Griffiths, 1997).

Such a definition allows us to take a broad view of what constitutes violence in the workplace. It incorporates both physical and psychological elements, with implied or actual challenges to staff safety, well-being and health, in situations in some way connected with their work. However it does not allow for inclusion of incidents in which staff behave in a violent manner towards their clients which is arguably an important omission.

Bowie (2002), whilst not offering a succinct definition of workplace violence, provides a system of categorisation which has the advantage of incorporating a range of relevant typologies which are not all encompassed by the Wynne et al. (1997) definition. Bowie's work is based on that developed by the Californian Division of Occupational Safety and Health (Cal/OSHA, 1995) and includes four categories of violence; intrusive, consumer-related, relationship, and organizational. These can be found summarised in Table 2.1. Included in Type 1

(intrusive violence) are individuals with no legitimate relationship to the workplace who carry out violent acts in the course of committing some form of criminal act. Type 2 (consumer-related violence) includes not only violence towards staff from clientele, but also vicarious trauma resulting from exposure to details of abuse histories of those individuals, and also violence perpetrated by staff towards those to whom they are tasked with providing a service. Type 3 (relationship violence) incorporates both staff bullying other staff and violence carried out by individuals who have some form of relationship with staff but who are not actually employees themselves. Finally, Type 4 (organizational violence) acknowledges the role of organizational culture in providing a setting which can trigger and foster violence in the workplace.

This thesis focuses on Type 2: consumer related violence. In particular consumer/client/patient violence against staff and staff violence to these groups. As such, a minor adaptation of the Wynne et al. (1997) is proposed:

> *...incidents where persons are abused, threatened, or assaulted in circumstances related to work of either party, involving an explicit or implicit challenge to their safety, well-being, or health.*

This acknowledges that either party involved in the in the interchange can be a worker, thus allowing for the possibility of worker to client violence. This thesis will use the term 'violence' to include both verbal and physical incidents, and will not use the term 'aggression'.

Table 2.1 **Bowie's (2002) expanded workplace violence typology**

Type	Examples
Type 1:	
Intrusive	Criminal intent by strangers
	Terrorist acts
	Mental illness or drug related aggression
	Protest violence
Type 2:	
Consumer-Related	Consumer/clients/patients (and family) violence against staff
	Vicarious trauma to staff
	Staff violence to clients/consumers
Type 3:	
Relationship	Staff-on-staff violence and bullying
	Domestic violence at work
Type 4:	
Organizational	Organizational violence against staff
	Organizational violence against consumers/clients/patients

2.3 Prevalence of workplace violence

It is only in recent years that any systematic collection of data on workplace violence has been carried out throughout the world. From 1989, a number of countries became involved in the International Crime Victim Survey (ICVS) which involves interviews with random samples of adults about their victimization experiences taking the broad view of violence of the European Commission. Findings from the British Crime Surveys (Mirrlees-Black et al., 1998; Kershaw, Budd, Kinshott, Mattinson, Mayhew & Myhill, 2000; Upson, 2004) indicate that the number of reported incidents in Britain peaked in 1995[1]. Since that time there has been a 35% decrease (Upson, 2004), although this would not appear to apply to all professional groups (National Audit Office, 2003). Despite this fall, it is clear that violence in the workplace remains a significant problem with 376,000 workers (1.7% of the total British workforce) experiencing 849,000 violent incidents at work in the year preceding the 2002/2003 survey. A total of 196,000 workers (0.9% of the workforce) were subject to 431,000 actual physical assaults. The number of incidents is higher than the number of victims because a victim can experience more than one incident in the year. Over a quarter (28%) of all people assaulted or threatened at work were estimated to be repeat victims, experiencing three or more incidents in the time period studied. The Health and Safety Commission have been so concerned about the levels of reported workplace violence that they launched a programme beginning in the year 2000 aimed at reducing the incidence by 10% over a three year time span.

It is not only Britain which reports worrying levels of workplace violence. In the United States for example, violence was identified as the most important security threat to America's largest corporations in 1999

---

[1] It is worth noting that the findings of the British Crime Surveys (Mirrlees-Black, Mayhew & Percy, 1997; Mirrlees-Black et al., 1998; Upson, 2004) are likely to underestimate the actual frequency of violent incidents in workplaces since their definition of such incidents extends to those involving members of the public only. Whilst this includes clients and patients, events involving colleagues and anyone with a domestic relationship with the victim are excluded. Staff to client violence is also excluded of course.

(Pinkerton, 1999), remaining so today (Pinkerton, 2003). Twenty people are murdered and 18,000 physically assaulted in the workplace each week in the United States and homicide is in fact the second leading cause of occupational death for all workers (Loomis, Wolf, Runyan, Marshall & Butts, 2001) although it is actually *the* leading cause of occupational death for female workers (Jenkins, 1996 – reported in Chappell & Di Martino, 2000). No country can claim to be free of workplace violence, although prevalence and patterns are known to vary. The International Crime Victim Survey (Mayhew & van Dijk, 1997) found that rates of physical assaults at work ranged, in males, from 0.4% (Asia) to 2.7% (Western Europe), and in females from 1% (Asia) to 4.6% (New World). Some of these variations may reflect cultural differences in reporting tendencies.

2.3.1 High risk professional groups

Not all groups of workers are subject to an equal risk of encountering violence at work. Although there are differences in the various professional groups' vulnerability across countries, there are some common factors to be found. Research suggests that those in jobs where cash is at hand, and/or considerable face-to-face contact between workers and clients is required, are at greatest risk (Mayhew, 2002). Results from the 2002/2003 British Crime Survey (Upson, 2004) identified two professional groups, falling into the latter category, who are disproportionately likely to be subject to violence (particularly physical assault) in the workplace in Britain. These are nurses and police officers. Whilst the average risk of assault to staff at work in Britain was found to be 0.9%, 3.3% of health professionals (which includes nurses) and 12.6% of those in protective service occupations (which includes police officers) were physically assaulted in 2001. In terms of verbal threats, the average risk of 1.0% compares with 2.3% for health professionals and 3.0% for those in protective service occupations. These groups of workers are thus clearly at heightened risk of being subject to violence whilst carrying out their duties.

2.3.1.1 Nursing staff

Some extreme cases of violence towards healthcare workers have received widespread coverage in the media and as such are brought to the attention of the general public. Examples of such cases include a State Enrolled Nurse who was stabbed to death at Tooting Bec Hospital in 1974, and in 1993 in two separate incidents, both an occupational therapist and a voluntary worker were fatally wounded (see Sheppard, 1996). Many incidents of physical assault of healthcare staff will not be so highlighted. Indeed, it is believed that around half of all assaults on nurses are not even formally reported by the staff (Royal College of Nursing (RCN), 2002). A study by Crowner, Peric, Stepcic and Van Oss (1994) highlights the problem of under-reporting. They analysed video tape evidence of psychiatric nurses at work and found that although 155 incidents of violence towards the staff were observed in the time period studied, only 12 incident forms had been completed.

In health care settings, nurses are the group who are most likely to be physically assaulted with studies suggesting that in the region of 90% of all assaults in hospitals are directed towards these staff (Whittington, 1994). The rate of injuries sustained by nursing staff from patient assaults in the United States exceeds that of construction workers, a group of employees traditionally viewed as having the most dangerous occupation (Flannery, 1996). Dealing with violence is thus increasingly seen as a part of the day to day responsibility of nursing staff, a far cry from the image of the 'lady with the lamp' tending to the grateful sick.

In 2002, the Royal college of Nursing reported that in a random survey of nurses, 32% of those employed in NHS settings had been physically assaulted in the previous 12 month period. The number of nursing staff experiencing violence at work is likely to particularly high for those working in specialist psychiatric facilities where dealing with violent

patients is a day-to-day nursing responsibility[2]. In medium secure settings for example, it has been found that between 59% and 75% of all patients behave in a violent manner at some point during their detention (Gudjonsson, Rabe-Hesketh & Wilson, 1999; Torpy & Hall, 1993). Furthermore, Gournay, Ward, Thornicroft and Wright (1998), in a survey of inner London adult mental health acute wards and psychiatric intensive care units, found there to be an assault every three days per ward, two thirds of which were directed towards nursing staff. Ryan and Poster (1993) found that over a quarter of psychiatric nurses interviewed reported having been assaulted in the previous month and only 8% said that they had never been assaulted in the workplace.

The government has shown concern about levels of violence directed towards healthcare staff and as part of their 'Zero Tolerance' campaign set a target to reduce incidents by 20% by 2002, and 30% by 2003 (Dobson, 2000). Unfortunately, most NHS trusts reported an increase in incidents in the 2000-2001 period, and missed the targets set for 2002 (National Audit Office, 2003); rather than a decrease of 20% there was actually an increase of 13%. This is in contrast to the overall figures found in the British Crime Survey (Upson, 2004) which has found a decrease of 9.4% in workplace violence generally.

2.3.1.2 Police officers

Police officers are another group of workers who are disproportionately likely to encounter violence at work. In view of this, in 1992 the Home Office set up a working group to look at the protective requirements of officers and the group commissioned research to investigate this area (Brown, 1994). One of the areas examined was the extent and severity of injuries sustained by police officers who had been assaulted. A total of 17% of officers involved in the 226 incidents studied sustained what were considered to be serious injuries (fractures, serious cuts and bruises,

---

[2] This may, in part, account for the considerable under-reporting of violent incidents in this setting which was noted earlier, as nursing staff working in psychiatric settings often perceive dealing with violence to be part of their jobs (Crowner et al., 1994).

concussion and trauma). Obviously, some officers have been killed whilst carrying out their duties, such as Detective Constable Stephen Oake who was fatally stabbed by a suspected terrorist in January 2003 (Carter, Ward & Hopkins, 2003).

In 1997 almost a quarter (24.6%) of all police officers were physically assaulted, a figure far surpassing the risk to workers generally (1.2%) (Budd, 1999; 2001). This is not a new phenomenon, and it is interesting that unofficial figures for assaults on police officers in the early 1900's suggest that around quarter of all London policemen were assaulted per year at that time (Ingleton, 1997), exactly the same as the figures for today. Whilst most police officers are likely to experience physical assault at some point in their careers, statistics on this issue are variable (Mitchell, Cowan & Hamilton, 1998). Waddon and Baker (1993) (cited by Mitchell et al, 1998) report that 75% of North Wales police officers and 80% of Metropolitan police officers who were or had been custody officers were subject to assault. Unfortunately no time scales or definitions were identified in this study. According to Mitchell et al. (1998) risk of assault is not evenly distributed across ranks, specialisms and localities. Moxey and McKenzie (1993) carried out a meta-analysis of assault surveys and found that assaults are highest for sergeants and constables under 30 years of age who have completed less than ten years service. Officers who were in operational posts, especially on patrol, as well as those working in Support Units, Courts and Custody, were more at risk than other officers. Ernst and Young (1993) found that in one year, 20% of inspectors and 30% of constables were physically assaulted. Constables in patrol roles were particularly at risk with a massive 60% being assaulted within the time period in question.

2.3.1.3 Consequences of workplace violence for high risk groups

Researchers investigating the psychological impact of violence on workers have found similar results across professional groups. Thus Whittington and Wykes (1994) found that nursing staff who had been assaulted at work experienced a range of emotional reactions including

anxiety, fears and phobias, cognitive effects, guilt and self blame, anger and morbid hatred. The National Audit Office (2003) identified a range of consequences for nurses of violent encounters at work: burn out (leading to emotional exhaustion and depersonalisation), symptoms of stress ('blue', 'nervous', 'edgy'), periods of (certifiable) absence from duty, increase in the number of cigarettes smoked per day, increase in the number of units of alcohol consumed per week, decrease in general health (increase in common illness symptoms), and a decrease in the hours of quality sleep per night. Police officers have also been shown to exhibit adverse psychological and physical difficulties following violence at work. In a study of police officers who had been assaulted for example, 26% of 53 officers interviewed met the criteria for a diagnosis of Post Traumatic Stress Disorder (Martin, McKean & Lane, 1986). This is likely to be an underestimate since Post Traumatic Stress Disorder is now more readily diagnosed as the condition has become more widely recognised and accepted. Police officers have also been reported as having increased risk of premature death, suicide, and substance abuse and it is postulated that these stress related problems are the result of exposure to stressful and violent situations in the workplace (Anderson & Bauer, 1987). However, it is only relatively recently that it has been acknowledged that police officers may experience psychological difficulties following exposure to violent situations at work (Ainsworth, 2002; Toch, 2002).

2.4 Staff to consumer/client/patient violence

Much of the literature which examines violence in the workplace assumes employees to be the victims of violence perpetrated by others. However, this is not always the case since sometimes the worker may be the initiator of the violent interaction. This form of workplace violence is often overlooked or denied (Bowie, 2002).

2.4.1 Health care staff to patient violence

Taking healthcare staff as an example, it is clear that violence in the staff-patient relationship is not always entirely driven by the patient. There are many examples of inquiries into allegations of ill-treatment of patients by healthcare staff (see Sheppard, 1996). One of the most well-known is detailed in the Report of the Committee of Inquiry into Complaints about Ashworth Hospital (Department of Health and Special Hospitals Service, 1992). The inquiry was ordered following allegations of improper care or ill-treatment of patients at Ashworth made in a documentary shown on Channel 4 in 1991. Of the four case studies outlined in the report, two involved the physical abuse of patients by staff. In one case, a Nursing Assistant used a snooker cue as a 'goad' and subsequently assaulted a twenty year old patient who later died whilst in seclusion. The inquiry team also concluded that another male patient had been 'assaulted and roughly handled' (p.62) sufficient to cause multiple bruises. The report states that:

> *'...nursing staff responded in an inhumane and degrading way to an episode of bewildered agitation and distress on the part of the patient, which demanded an entirely different professional response'* (p.62).

In addition to detailed case studies, the inquiry team solicited letters from patients. They noted that a recurring theme in these letters was physical abuse and assault of patients by staff and patients stated that they felt 'intimidated' by the staff.

A more recent example of violence directed towards patients by a healthcare worker can be found in the case of Harold Shipman, the GP who, over a 23 year period, killed at least 215 of his patients, with 'real suspicion' in a further 45 cases (Smith, 2002). Shipman killed his victims usually by means of lethal dose of opiate, most frequently diamorphine. The Honourable Mr Justice Forbes, when sentencing Shipman on 31st January 2000 stated:

> *'None of your victims realised that yours was not a healing touch. None of them knew that in truth you had brought her death, death which was disguised as the caring attention of a good doctor.'*

Interestingly, this manner in which he killed his patients led Dame Janet Smith (Chairman of the Inquiry) to describe the murders as 'non-violent killing' (Chapter 14, para. 14.21), a description perhaps at odds with contemporary definitions of violence.

2.4.2 Police officer to suspect violence

As with nursing staff, conflict with clients is not always exclusively directed from client to police officer. There are some well known examples of this from the United States such as the beating of Rodney King by Los Angeles Police Department officers which was filmed by an amateur video camera enthusiast from his apartment balcony in 1991 (see Kappeler, Sluder & Alpert, 1998). King was stopped by the police for alleged traffic offences. When the unarmed King got out of his vehicle he was twice shocked with a fifty-thousand volt Taser, savagely hit on the head with nightsticks and repeatedly kicked by officers. He was struck at least 56 times with some 21 officers watching or participating. His injuries included 11 skull fractures, a broken cheekbone, a fractured eye socket, a broken ankle, missing teeth, kidney damage, external burns and permanent brain damage. The inquiry following this incident concluded, amongst other things, that the police officers within the department were rewarded for being 'hard nosed' and that they viewed citizens with resentment and hostility, working within a subculture of prejudice and violence (see Kappeler et al., 1998). Moving back to the United Kingdom, another extreme example of police behaving in a violent manner towards suspects comes from the case of the British police officer, PC Keith Empsall, who was convicted of common assault on a man he was arresting after the incident was caught on camera by a student (Wainwright, 2002).

There are other examples of inappropriate behaviour by police towards suspects in the United Kingdom. In the famous case of the Birmingham Six, whose convictions for the 1975 Birmingham pub bombings were found to be unsafe by the Court of Appeal, an ex-police officer came forward at the time of their appeal and stated that the men were ill-treated during their detention in Queens Road Police Station (See Gudjonsson, 1992). This ill-treatment included a dog handler encouraging a dog to bark all night in order to keep the suspects awake. Gudjonsson (2003) reports on a study which examined police 'oppressive tactics' in 20 cases where suspects had initially denied charges but subsequently confessed on audio-tape. In eight cases 'extreme' oppressive tactics were found to have been used in the police interviews. Examples include threatening to carry on questioning the suspect no matter how many times the offence is denied and raising voices.

The Home Office publish statistics on complaints about the police and a perusal of these can tell us something about the levels of inappropriate conflict behaviour by police to citizens. Of course, the number of complaints substantiated may not be a true reflection of the actual extent of this problem for a variety of reasons. Reported figures could be argued to substantially underestimate actual frequency as there is likely to be a reluctance to complain by certain groups. Also, many incidents may not be extreme but systematic and subtle. In the 12 months to March 2001, 18,911 complaints were lodged against police officers in England and Wales (Povey & Cotton, 2001). The mean number of complaints per police force for the time period in question was 238 per 1000 officers with a range of 82 per 1000 to 643 per 1000. This very wide range at least in part reflects different complaint recording practices of the difference forces. A total of 903 (9%) complaints dealt with were substantiated and of these 233 (26%) concerned 'oppressive behaviour' which includes assault, oppressive conduct/harassment, and unlawful/unnecessary arrest/detention.

2.5 Conclusions

It is clear that conflict in the workplace is a significant problem for employees in high risk professional groups and their clients. This cannot be explained purely in terms of client characteristics. Not only is it not always clear who is the 'perpetrator' and who the 'victim', but also the causes of violence and the reasons why it is sometimes escalated rather than de-escalated are complex. Employers have a legal obligation to prevent violence in their workplaces and many have established staff training and support packages in attempts to fulfil this. Two important recommendations concerning training for staff in high risk groups are, 1) that they receive instruction on the causes of violence, and 2) that they be aware of ways in which their own actions may contribute to or exacerbate any potentially violent interactions (Davies & Frude, 2001). Both of these are integral to this thesis which focuses on consumer related workplace violence.

CHAPTER THREE

Literature Review: Causes of Violence

3.1 Introduction

Media images tend to portray the causes of workplace violence in an overly simplistic way, stereotyping perpetrators as 'disgruntled employees', 'angry spouses', 'unhappy, desperate and often psychiatrically impaired people' venting their rage on innocent workers (Mantell & Albrecht, 1994). However, if effective prevention and control is to be achieved, there is an important need to recognise that a wide range of factors influence violence in work settings (Chappell & Di Martino, 2000). Whilst there is a vast body of literature concerning the causes of violence generally, it is difficult to gain a cohesive overview of the area (Anderson & Bushman, 2002; Tedeschi & Felson, 1994). This is partly because research has developed within a number of distinct areas such as biology, psychology, criminology, and sociology, each with their own individual perspective. The literature from these different epistemological viewpoints has tended to focus on different causal factors and the areas remain fairly separate. Relatively little empirical research focuses specifically on work settings (Barling, 1996).

This section will first give a brief outline of the general literature on the causes of violence, making reference to specific literature concerning workplace violence where appropriate. Wherever possible, reference will be made to relevant literature concerning high risk professional groups. Following this, Weiner's (1995) attribution-emotion-behaviour model will be proposed as an appropriate framework within which to consider the causes and development of violent interchanges in occupational settings.

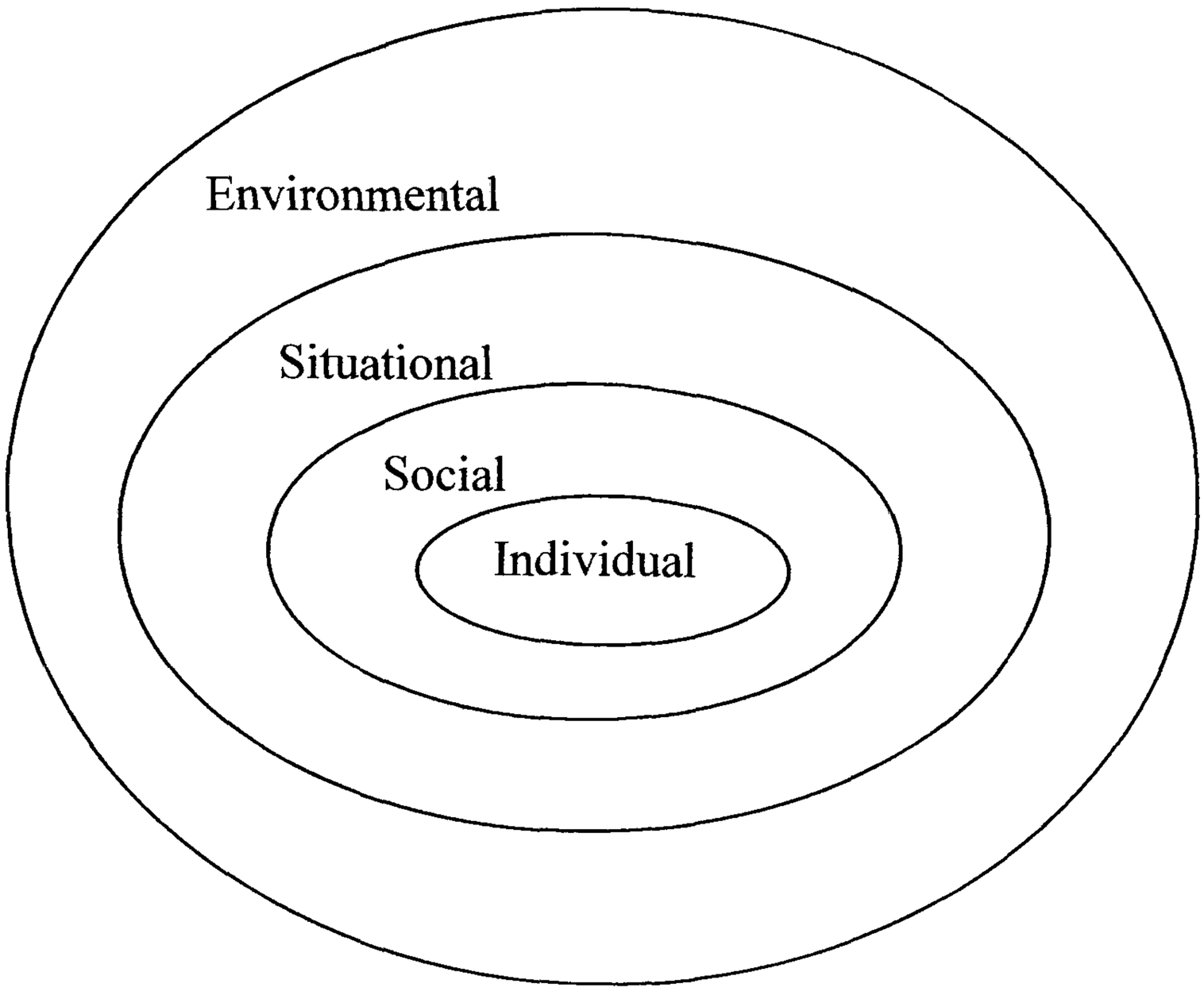
3.2 Causes of violence

Historically, the study of violence has been concerned with identifying traits that render individuals susceptible to committing violent acts. Thus there has been a search for genes, hormones, chromosomal anomalies and so on that

might explain the behaviour (e.g. Lorenz, 1966; McDougall, 1908). A range of psychological theories have taken biological factors as their basis but increasingly incorporated cognitive variables (e.g. Berkowitz, 1989; Schachter, 1964; Zillman, 1971). Some researchers have identified certain individual differences such as personality characteristics, attitudes and psychological health as important determinants of violent behaviour (e.g. Hart, Kropp & Hare, 1988; Monahan, 1981). Situational and contextual factors have also been examined (e.g. Anderson, 1990; Kumar & Ng, 2001). Social interactionist theories have attempted to bring together the plethora of relevant causal factors, acknowledging that the complex phenomenon of violence cannot be explained without reference to a range of relevant biological, environmental, social and psychological factors (e.g. Tedeschi & Felson, 1994). In common with such approaches, recent psychological theories also have the advantage of viewing the causes of violence more widely than did earlier theories. Such theories assign a critical role to cognitive factors whilst also incorporating other relevant variables (e.g. Beck, 1999; Weiner, 1995).

When considering the range of potential causes of violent behaviour which have been put forward, it is perhaps useful to group them into four broad categories which overlap and interact: environmental, situational, social, and individual. Figure 3.1 illustrates this. The environment is the general physical and organisational context in which a violent incident occurs. Superimposed on this are the specific situational factors of the encounter. Social factors comprise the individuals' current and historical social circumstances. Individual factors are those which are specific to the individuals involved in the event such as biological predisposition and attitudes. For the purposes of this thesis, the various causes will be outlined within these four broad categories. It is acknowledged, however, that using such a structure is not without it difficulties as certain causes do not fit easily into one particular category.

Figure 3.1 Categorisation of causes of violence



3.2.1 Environmental causes

Violence at work clearly takes place within a general physical and organisational environment. Research findings have suggested that a variety of such factors can be of relevance to the development of violent incidents. These can be tangible aspects of the environment or cultural elements of the organisation.

3.2.1.1 Physical conditions

Intuitively one would expect that conflict is more likely to occur in certain types of environments such as those which are overly hot, noisy, or crowded as these factors are known to increase stress in those encountering them. Certainly the physical condition of the working environment, exposure to toxic waste, polluted air and water, and unsanitary conditions have been associated with negative attitudes and behaviours of workers (Altman, 1993). Similarly, overcrowded, poorly ventilated, dirty and noisy work premises have higher levels of violence than settings which do not contain these features (Homel & Clark, 1994). Kumar and Ng (2001) acknowledged the association

between crowding and violence in psychiatric settings and carried out a literature review of this area. They concluded that level of crowding interacted with other factors to influence expression of violent behaviour. These factors included amount of privacy available for patients, the degree of control patients perceived themselves to have over their situation, architecture of the ward, and the amount of interpersonal space afforded to patients.

The general quality of the environment may also be influential. In hospital settings for example, comfortable, well designed and well maintained facilities give an impression that the patient and ward are valued. Consistent with this is the fact that it has been found that violence is more likely to occur on poorly maintained wards (White, Kasl, Zahner & Will, 1987). Similar findings have been reported in relation to other settings. Public houses which are unclean, shabby or have inexpensive physical surroundings have been found to have greater levels of violence than cleaner more expensive bar settings (Graham, La Rocque, Yetman, Ross & Giustra, 1980; Leather & Lawrence, 1995).

3.2.1.2 Organisational culture

In addition to the physical context, the organisational environment may be influential in the development of violent incidents. In the police force, for example, organisational factors generally have been postulated to influence conflict situations between police and citizens. The Christopher Commission (Christopher, 1991) which investigated the circumstances surrounding the arrest of Rodney King in the United States, noted that the police officers were working under a chief of police who indoctrinated police personnel with aggressive attitudes which members of the police department internalised. When reviewing records from the Mobile Digital Terminals of officers, hundreds of improper messages were found including many talking about beating suspects and eagerness to be involved in shooting incidents and these messages reflected the attitude of the police chief at the time. Thus the culture of the organisation can increase violent behaviour of staff and

their willingness to engage in violent incidents with suspects. Such propensities may serve to escalate conflict situations and the violence of the suspects themselves.

Culture can also influence violence in the nurse-patient relationship. In the Report of the Committee of Inquiry into Complaints about Ashworth Hospital (Department of Health and Special Hospitals Service, 1992), a particular staff shift was reportedly characterised by fear of patients getting out of control and unmanageable. Staff tended to expect the worst and responded to low level incidents and perceived threats with displays of staff strength. It was within this context that a patient was physically assaulted by staff on more than one occasion. These incidents were not reported or investigated.

It is worth noting here that being the target of a violent incident, or perceiving the threat of violence, can have a major impact on the manner in which a staff member deals with an incident. Gudjonsson, Rabe-Hesketh and Szmukler (2004) for example, in a study of violent incidents in a medium secure unit, found that a member of nursing staff being the target of a violent incident, was a strong predictor of provision of emergency medication, the use of physical restraint, and the use of seclusion.

The organisational environment in healthcare settings has also been examined in research which investigates the causes of violence. Katz and Kirkland (1990), for example, found that patterns of social organisation and staff behaviour differentiated between violent and peaceful wards. They noted that violence was more frequent and extreme on wards where the staff functions were unclear and in which activities, meetings, or staff-patient interactions were unpredictable. This contrasted with the more peaceful wards which were characterised by strong psychiatric leadership, clearly structured staff roles, and standardised and predictable events. Further support for this comes from Gould (1994) who found that there was a dramatic fall in the number of incidents in which staff were injured by patients where there was: 1) a change in nursing approach from diagnosis-based

clinical management towards a collaborative attempt to provide a more homely social environment, 2) a stable staff group which could adequately cover shifts, 3) a change in hospital management structure from a rigid hierarchy to more independence for the ward manager, and 4) an improved physical environment.

Whilst impoverished physical surroundings, overcrowding, excessive noise, and so on, provide the setting conditions in which violence is more likely to occur, clearly such circumstances cannot fully explain workplace violence. Thus although such contextual factors may lower thresholds, other factors must have an important role to play as not everyone who is subjected to a less than ideal environment behaves in a violent manner. The organisational culture also appears to play a role in providing the setting conditions within which violence is more or less likely to occur. These factors can influence the propensity for violence of both staff and their clients.

3.2.2 Situational causes

Within a given environment, specific situations will arise which will influence the development of violent incidents. Some of these will be considered now.

3.2.2.1 Frustration

As far back as the 1930's, Dollard, Miller, Doob, Mowrer and Sears (1939) proposed a 'frustration-aggression' model which proposes that violence is motivated by frustration, an *external* condition which prevents the individual from attaining his or her goals. Miller (1941) went on to modify the theory and claimed that frustration may instigate a range of different responses, violence being just one of these. Berkowitz (1989) further developed this theory by proposing anger as a mediating variable between frustration and violence and claimed that frustrations perceived as deliberate or illegitimate are more likely to give rise to anger than those that are perceived as accidental or legitimate. Such theories do not explain the use of violence in the absence of frustration, and the intervening emotion of anger, as is the

case, for example, with people who are violent purely for pleasure. They also cannot explain situations where violence is used to attain a goal but in the absence of specific thwarting, or where the violence occurs in response to insults or threats. Whilst frustration has a part to play in the aetiology and maintenance of some violent incidents, this is likely to be just part of the picture rather than playing the central role which Dollard et al. (1939) initially claimed.

Frustration may have a role to play in the development of violent incidents within the workplace, since it is a common occurrence in such settings. Taking the example of a prisoner or detained patient who is incarcerated against their will, there is little the individual can do about their situation save appeal against the judgement made against them. Where an individual's bid for freedom is denied, their goals are thwarted and this can be seen to fit in with the circumstances of 'frustration' outlined by Dollard et al. (1939) and subsequent researchers in this area. Kenny (2002) draws attention to other stressors in the work setting which could cause frustration in workers and subsequently, violence. He claims that workplace violence is usually the final incident in a predictable sequence of events involving that person and the workplace. The process would normally commence with a traumatic event such as termination of employment or negative performance appraisal. This leads to extreme emotional reactions such as anger. Stress builds up over time until the worker sees no option but to use violence in order to achieve justice.

3.2.2.2 Opportunity

Having the opportunity to commit an act of violence is also an important factor to take into account in the consideration of causes of violent behaviour. Some research in this area can be found in the criminological literature and is based on routine activities theory (Cohen & Felson, 1979) which suggests that in order for a predatory offence to occur, certain factors have to be in place at a particular time. These include a motivated offender, a suitable target, and the absence of a capable guardian. The methodology

used in this area tends to be that of crime analysis (Ekblom, 1988). An example of this comes from the work of Barker, Geraghty, Webb and Kay (1993) who examined street robberies in London. They found that most of these crimes occurred in areas predominantly populated by ethnic minority groups, were perpetrated by men of Afro-Caribbean background aged 16-19, victims were mainly white apparently wealthy women who were alone and on foot near their own homes. Again, causality is not demonstrated in this research and it is probably best to view opportunity as a proximal antecedent to violence where other precursors are also present.

Clearly, for violence to occur in the workplace, there has to be opportunity. There are more opportunities to be violent in some work settings than others. A fair amount of research has examined the nature of work environments that provide more opportunity for violence to occur. A number of situational factors have been associated with elevated risk of workplace violence. Working alone in vulnerable settings (such as small shops and petrol stations), working with the public, with valuables and cash, with people in distress, outside of normal working hours, in an environment increasingly 'open' to violence (such as schools) are associated with higher risk of being subject to assault (Chappell & Di Martino, 2001). Isolated work environments have also been associated with higher risk; in one study it was found that a third of professionals who went out to meet clients had been threatened and 1 in 7 male workers had been physically assaulted whilst working out of the office situation (Vandenbos & Bulatao, 1996). LeBlanc and Kelloway (2002) identify 28 job characteristics which potentially increase employee risk for violence. These can be found in Table 3.1.

This further emphasises the need to define the 'workplace' quite flexibly, rather than focusing on more traditional work settings such as hospitals, offices, and so on. Employees may carry out work related activities in a wide range of places including their own and other people's homes.

Whilst situational factors provide the setting conditions which increase the likelihood of a violent incident occurring in the workplace, these cannot fully explain the phenomenon. Despite the presence of such situations, not all individuals behave in a violent manner. Other factors of causal significance must also be considered.

Table 3.1 Job characteristics which potentially increase employee risk for violence (LeBlanc & Kelloway, 2002)

1 Physical care of others	15 Serve alcohol
2 Emotional care of others	16 Exercise security functions
3 Interact with the public	17 Exercise physical control over others
4 Deny the public a service or request	18 Supervise others
5 Decisions that influence other people's lives	19 Interact with frustrated individuals
6 Work alone during the day	20 Discipline others
7 Work alone during the evening/night	21 Deliver items of value
8 Oversee or administer people's money	22 Collect items of value
9 Dispense drugs	23 Work nights or evenings
10 Handle valuables	24 Go to clients homes
11 Exchange money with the public	25 Handle weapons other than guns
12 Guard valuables	26 Contact with individuals under the influence of alcohol
13 Handle guns	27 Contact with individuals under the influence of illegal drugs
14 Sell alcohol	28 Contact with individuals under the influence of medication

3.2.3 Social causes

The social circumstances within which people live and work, both current and historical, can also have an impact on their violence potential.

3.2.3.1 Family factors

Family factors are considered relevant to violent behaviour, particularly in the criminological literature. Research in this area has examined the histories of violent and non-violent people, using both retrospective and prospective methodologies. Such research has found that individuals in the general population with a history of disturbed family background and abuse are at increased risk of displaying violent behaviour (Earles & Barnes, 1997). Also, a range of family factors such as poor parental supervision, violent parent behaviour, parental conflict (McCord, 1979), and having a convicted parent (Farrington, 2001), have been identified as childhood predictors of later convictions for violent offences. In connection with these factors, a range of hypothesised causal mechanisms have been postulated including lack of self-control resulting from poor parental supervision and modelling (Sampson & Lauritsen, 1994).

As well as abusive family history, lack of appropriate supervision and parental modelling, other negative experiences within the family have been associated with later risk of violent behaviour. One example is loss of a parent through death, separation or divorce (e.g. Klassen & O'Connor, 1990). Also, disruption of the family environment through such factors as parental arrest, hospitalisation, and/or drug and alcohol abuse, has also been linked with later violent behaviour of people with mental disorders (Convit, Jaeger, Lin, Mesiner & Volavka, 1988). Thus a range of family factors have been found to be of relevance when considering the development of violent behaviour. It follows that the relationship between these different factors and violence may be quite complex. This is an area which has been addressed by Monahan and colleagues, who have carried out extensive research in the area of violence risk prediction (Monahan, Steadman, Silver, Appelbaum, Clark Robbins, Mulvey, et al., 2001). They found a complex relationship between family factors and subsequent violent behaviour in a sample of patients with mental health problems discharged from psychiatric inpatient settings. Thus whilst it might be predicted that a history of abuse would be associated with increased risk of violence,

Monahan et al. found that the nature of the abuse suffered was important: having suffered physical abuse as child was associated with violence but sexual abuse was not. Also, although deviant behaviour of parents was, in general, linked with subsequent violence, this was attenuated if the patient had lived with the parent prior to age 15. The association between paternal drug use and violence was found to be stronger for white than African-American patients. In addition, maternal drug use was associated with male, but not female, patient violence. This suggests that studies which do not consider the potential interaction of different family factors may oversimplify the picture.

The research demonstrates that childhood experiences are clearly important when considering violence potential of adults. However, whilst certain factors, such as having been seriously physically abused, would appear to raise an individual's risk of exhibiting violent behaviour across the board, other factors show interaction effects with variables such as gender or race[3].

Investigations into the relevance of family factors to violent behaviour tend to be most predominant in the criminological literature. Thus much of the research focuses on these factors and subsequent violent offending. The literature concerning violence in the workplace is likely to consider these factors where the 'perpetrator' is an offender or patient with mental health problems. When staff who behave in a violent manner are considered, it is unlikely that their family histories will be investigated. It can be seen how this might be difficult to achieve for both ethical and practical reasons.

3.2.3.2 Social circumstances

Behaving in a violent manner has been found to be more common where people are in situations of poverty and social disorganisation (Anderson, 1990; Bottoms & Wiles, 1997). This cannot be accounted for by the high-risk backgrounds in terms of violence risk (e.g. gender, age, race, socio-

[3] Race and gender issues are explored in more detail later.

economic status) of individuals living in those areas (Silver, Mulvey & Monahan, 1999). People living in socio-economically disadvantaged areas are also more likely to be the victims of violence (Miethe & McDowall, 1993). Socio-economic status has been linked with youth violence in studies from a range of countries including the United States (Thornberry, Huizinga & Loeber, 1995), the Netherlands (Hogh & Wolf, 1983), New Zealand (Henry, Caspi, Moffitt & Silva, 1996), and the United Kingdom (Farrington, 1998). It has been suggested that certain inner-city neighbourhoods either foster a sub-culture of violence which becomes an important group norm (Wolfgang & Ferracutti, 1967), or view violence as an accepted means of resolving conflict situations (Anderson, 1997).

Another social factor related to risk of violence in young people, perhaps not surprisingly, is having delinquent friends (Thornberry et al., 1995). However, the nature of this association is unclear, since behaving in a delinquent manner may lead to the development of friendships with other such people rather than vice versa (Elliott & Menard, 1996). Also, offenders under the age of 21 are more likely to offend with others and thus the association found may result from this tendency (Reiss & Farrington, 1991).

The social circumstances of individuals involved in workplace violence is another area where there is sparse information in the literature except, again, in the case of offenders and patients with mental health problems.

3.2.3.3 Social learning

There is some early research evidence to support the role of modelling in the development of violent behaviour. In a classic study in this area (Bandura, Ross & Ross, 1963), children were exposed to films of adults behaving in a violent or non-violent manner to a doll and their subsequent behaviour when exposed to the same doll was observed. It was found that those children who had seen the violent version of the film reacted more violently towards the doll than did children who had seen the alternative version.

The consequences of violence such as rewards, punishment and labelling, may also have a feedback effect and thus influence future expression of violence. Although in it's original formulation social learning theory perhaps had a rather simplistic notion that children merely copy violent behaviour which they have witnessed others carrying out, this view has been revised and there is now an increased emphasis on the role of consequences of violence for the individual. Bandura (1986) suggests that 'values' and 'expectancies' are important when considering violent behaviour. Thus a child who bullies others may learn that this behaviour produces benefits and if the child has not been caught or punished he/she may also learn that the behaviour is likely to go unchallenged in the future. Following on from this, social interactionist theory assumes that violent behaviour is a form of social influence and as such the behaviour is exhibited as a means of altering target individuals in some way in order to achieve important social goals (Tedeschi & Felson, 1994). There are three main social goals identified by Tedeschi and Felson which individuals may choose to attain through use of violence; to control the behaviour of others, to restore justice, and to assert and protect identities. According to the theory, violence is a normal consequence of conflict in human relationships with situational and interpersonal factors being viewed as critical in instigating violence.

The impact of the media on violent behaviour is also relevant here. Violence is frequently depicted in films, television programmes, and computer games and it has been suggested that this has a direct influence on those exposed to these media. Violence is a prevalent feature of films, television programmes, and computer games. Gunter and Harrison (1998), for example, found that 37% of United Kingdom television channels had violent content. Adults and children spend a considerable amount of time watching television, with those over the age of 18 spending on average 32 hours viewing, and those under 18 around 20 hours per week (Smith & Donnerstein, 1998). There is evidence that children do not just watch programmes aimed at a young audience (Hamilton, 1998), which suggests that they are being exposed to some level of violence in their viewing.

Children would appear to be more susceptible to the effects of media violence (Paik & Comstock, 1994), and particularly where the violence is successful in achieving a desired outcome or is not associated with punishment (Hogben, 1998).

Wood, Wong and Chachere (1991) reviewed evidence from 23 experiments with children and adolescents and concluded that media violence enhances violence in interaction with strangers, classmates and friends. A meta analysis of 217 studies published between 1957 and 1990 (Paik & Comstock, 1994) found that exposure to violence in the media was associated with increased violent behaviour. The link was found to be stronger for unrealistic representations of violence, such as in cartoons, a finding which has been replicated (e.g. Hogben, 1998). Hogben also found that the association decreases with age. It is likely that exposure to violence in the media has some influence on certain individuals in raising their violence potential.

This is not an issue which has been particularly addressed with reference to workplace violence, although it could be argued that the findings can be generalised to this issue.

3.2.3.4 Substance misuse

The misuse of alcohol and other substances seem to be associated with violent behaviour (Monahan et al., 2001). Some research for example, has shown that alcohol plays an important role in the perpetration of violent crime (Parker & Auerhahn, 1999) and many studies have shown that use of alcohol is a risk factor for domestic violence (e.g. Wiehe, 1998). In addition, alcohol use has been associated with group violence such as football hooliganism (e.g. Russell, 1993). It is not clear from such research whether alcohol plays a causal role since it may exert an indirect influence by lowering frustration tolerance or acting as a disinhibitor. Similarly, a tendency to use alcohol may result from impulsivity, which in itself is also related to violence. The use of alcohol will also interact with situational variables to determine whether or not

a violent response is exhibited. Thus the actual nature of the link between alcohol and violence is not clear cut.

In order to examine the nature of the association between alcohol and violence, Bushman & Cooper (1990) conducted a meta-analysis of 30 relevant studies. They concluded that the pharmacological effects of alcohol resulted in increased violent responding. Where individuals thought that they had received an alcoholic drink but in fact had not, there was no significant increase in violent behaviour, however. These general findings do not acknowledge the fact that alcohol does not always produce violent responding. Situational variables are likely to act as moderators and these include provocation, frustration, self-focused attention (monitoring one's own behaviour), and the presence of situational cues (Krahe, 2001).

Whilst some research has looked at the general association between alcoholism and/or drug disorder and violence, other research has examined the immediate impact of the use of such substances on a given incident. Studies using the former methodology have tended to find that substance misuse is not a reliable predictor of violence (Teplin, McLelland & Abram, 1993). Investigations taking a broad view of the impact of alcohol and drugs on violence, i.e. those which do not differentiate between long and short-term effects, or different types of substances may produce negative findings.

Gresnigt, Breteler, Hurk and Van den Schippers (2000) in a follow-up study of drug-using prisoners in The Netherlands, found that crack cocaine use was a more powerful predictor of violent crime than was the use of alcohol. This finding is supported by previous research which had found an association between the increase in the number of cocaine users in the United States and an increase in the incidence of violent crimes. The Gresnigt et al. study has it's limitations in that it only concerned participants who had committed a violent crime and were caught. Using reconviction data as a measure of criminal behaviour is certainly problematic. It may be for example that the individuals using cocaine were more likely to be

apprehended for some reason. Another factor of potential significance when considering the association between substance misuse and violence is the association of this behaviour with other variables linked with violent behaviour such as anti-social personality disorder.

The investigation of the influence of substance misuse on violence in the workplace is often confined to studies which examine offender and patient populations, rather than being addressed in the general literature in this area. In the 2002/2003 British Crime Survey (which examines violence across a variety of workplaces) however, respondents were asked if they believed the 'offender' was under the influence of alcohol or drugs. It was found that in 31% of incidents it was suspected that alcohol was involved, and in 21% drugs were involved. These were the views of the victims of violence and what the perceptions were based on is not clear.

Social factors are clearly of relevance when considering workplace violence. Certainly social learning may be relevant to the issue of violent cultures in workplaces where violent behaviour is 'modelled' to employees by colleagues and managers.

3.2.4 Individual-level causes

3.2.4.1 Biological factors

Whilst it is now generally considered that biological factors are likely to exert a distal, non-direct influence on violent behaviour, early theories viewed them as more direct and powerful predictors. One rationale for the initial strong emphasis on the biological basis of violence comes from the fact that in comparison to other animals, humans are disproportionately likely to kill members of their own species (Storr, 1968). From this, it has been argued that violence is a naturally occurring trait in humans which is biologically driven. In order to specify the exact nature of the physiological structures and/or processes considered to be at the root of violent behaviour, a range of potentially relevant factors were put forward including: instincts (e.g. Lorenz,

1966), innate drives (e.g. Freud, 1950), genes (e.g. Wilson & Herrnstein, 1985), pain-elicited reflexive fighting (e.g. Azrin, Hutchinson & Hake, 1967), hormones (e.g. Tollman & King, 1956), and brain structures (e.g. Egger & Flynn, 1963). What the theories have in common is that they all consider violent human behaviour to be caused primarily by some form of organic or innate factor. Although these theories were all put forward four or five decades ago, there has been more recent interest in certain biological factors which have been found to be associated with violent behaviour. In the early 1990's for example, Raine (1993) points out that low resting heart rate is a specific physiological characteristic of violent people which is indicative of low autonomic arousal and suggests fearlessness. In contrast, a high resting heart rate is associated with anxiety, behavioural inhibition and fear; factors which tend to inhibit violence (Kagan, 1989).

Although early biological theories of human violent behaviour can provide some illuminating insights into the behaviour, a range of criticisms can be levelled at them. Thus there are methodological problems such as the inability to test certain theories experimentally (e.g. Freud's drive theory), lack of supportive research findings (e.g. reflex fighting), findings being not always straightforward and therefore difficult to interpret (e.g. hormones), and assumptions being made about the applicability of animal studies to human behaviour (e.g. instincts). Siann (1985) evaluated the range of biological theories of violence and concluded that there was a lack of evidence for a clear link between biological factors and violence. More recent literature concerning this issue suggests that physiological factors certainly have some relevance (e.g. Raine, 1993). However, it is probably most productive to view such factors as having an indirect role in predisposing individuals to violence rather than being powerful proximal causes as was originally proposed.

Literature which specifically focuses on violence in the workplace does not tend to place an emphasis on biological factors, although to some extent this depends on the particular workplace being examined. Clearly research

which investigates violence to staff by patients with mental health problems is more likely to mention biological predisposition such as chromosomal anomalies than research in policing settings. Perhaps this is not surprising since the identification of biological causes in other work settings has limited utility. Thus, it is unlikely that a part of the selection procedure for staff in any setting will include an assessment of resting heart rate, investigations of hormone levels and/or chromosomes, as a means of identifying potentially violent employees. Such intrusive investigations would certainly have ethical implications.

3.2.4.2 Gender

Gender is another factor which may be viewed as a long-term influence on violence potential. Although this factor is considered here within the category of individual causes, it is acknowledged that there are social and cultural influences of relevance. Crime statistics of violent behaviour indicate that males are far more likely to exhibit such behaviour than females. The ratio of males to females in terms of convictions for violent offences is 5.8:1 (Home Office, 1998) and similarly, a review of arrest rates for juvenile violence found males to outnumber females by more than six to one (Scott, 1999). Gender differences in violent behaviour are seen from an early age, with evidence that these are apparent from pre-school onwards (Coie & Dodge, 1998).

Some researchers have assumed gender differences in violent behaviour to be so marked that they have not included females in their studies at all (Cervi, 1991; Rosenbaum & Hoge, 1989). Some texts focusing specifically on female offenders barely mention the issue of violence, except when considering women as victims (e.g. Walklate, 2001). Before dismissing female violence as an issue however, it is perhaps important to consider self-report as well as official statistics. Straus, Gelles and Steinmetz (1980), for example found that 71% of American mothers reported behaving in a violent manner towards their children, which compared with 58% of fathers, although men reported using more severe violence. In terms of spousal

abuse, this is generally considered to be more frequently perpetrated by men (see Englander, 2003), but again, self report studies suggest otherwise. Straus et al. found that 12% of both males and females reported acting in a violent manner towards their spouses. Some studies have found that the nature of the violence differs according to gender, with men using more severe forms (such as punching and kicking) whilst women used less severe forms (such as throwing things or slapping) (Gelles, 1990). However, Walby and Allen (2004) found that women reported more domestic victimisation experiences to men (a mean of 20 for females compared with seven for males) in the 12 months preceding the British Crime Survey interview. However, it should be noted that this involved reports of being a victim rather than a perpetrator. It could be that men are less likely to admit to being victims of domestic violence.

Moffitt, Caspi, Rutter and Silva (2001), in their longitudinal study of sex differences in anti-social behaviour, not only found similar rates of domestic violence for the men and women in their sample, but they also found similarities in partner violence perpetration at the most severe end of the violence continuum. Surveys show that one third of domestic injuries are inflicted by women and one quarter of domestic homicides are perpetrated by them (Archer, 2000). Similar findings have emerged when considering the violent behaviour of individuals with mental health problems. Whilst the nature and targets of the violent behaviour differ (Robbins, Monahan & Silver, 2000) the actual frequency of violent incidents does not appear to be significantly different in male and female psychiatric populations (Gudjonsson, Rabe-Hesketh & Wilson, 2000; Monahan et al, 2001, Swanson, Holzer, Ganju & Jono, 1990).

Gender differences in the expression of violence have been explained in a number of ways including biological, evolutionary or sociobiological, and social roles. Clearly there are gender differences in violent behaviour but the nature of these and the reasons for the differences are not clear cut. As

noted previously, the research of Monahan et al. (2001) suggests that other factors interact with gender to attenuate risk of violence.

Outside of the research focusing on offenders and patients with mental health problems, studies of violence in the workplace tend to consider 'victim' gender rather than 'perpetrator' gender (e.g. Hurrell, Worthington & Driscoll, 1996; Santana & Fisher, 2002). Chappell and Di Martino (2000) suggest that a person's gender can influence workplace violence in number of ways. They claim that men are more likely than women to respond in a violent manner to many workplace situations, whereas women are at greater risk of certain types of victimisation than men. However, as has been noted previously, in certain populations, the frequency of violence by males and females does not vary. Extrapolating findings from general population to all settings can thus be problematic as this may lead to an underestimation of the risk of violence by women in certain workplace settings.

The 2002/2003 British Crime Survey found that 80% of workplace assaults, and 77% of threats were carried out by male offenders only, whilst 15% of assaults and 10% of threats involved females only. The remainder involved both males and females. Threats were more likely to be carried out by both sexes together.

3.2.4.3 Race

Race is another factor of obvious long term influence which has been associated with violent offending. As with gender, it is acknowledged that race has social and cultural implications but is considered within the individual causes category for ease of reference. Reviewers of this area conclude that black people in the United Kingdom are more likely than other ethnic groups to commit offences, particularly violent offences (Smith, 1997; Rutter, Giller & Hagell, 1998). However, the reasons for this association are not straightforward.

The MacArthur Foundation study of mental disorder and violence found that there appeared to be an interaction between race of the individual and other factors, such as parental substance misuse, which had implications for violence risk potential. Thus having a father who abused drugs had greater implications in terms of risk of violent behaviour for white than African-American individuals. It was found that there was a greater difference between whites who had fathers with drug problems and those who had not (57.7% versus 19.9% exhibiting violence), than between African-Americans who had fathers with drug problems and those who had not (42.4% versus 36.5%). Therefore, there would appear to be complex interactions between race and other risk factors which influence violent behaviour.

One potential explanation for the apparent over-representation of black people in violent crime is racism in the judicial system. In the United States it has been found that blacks are more likely than whites to be suspected, arrested, convicted if charged with an offence (Elliot & Ageton, 1980), and given a prison sentence rather than probation (Jackson, 1997). In the United Kingdom, the police force have been accused of 'institutional racism' (e.g. McPherson, 1999). This accusation was first put in the inquiry report into the police investigation into the murder of a black citizen, Stephen Lawrence. More recently, a reporter infiltrated the police force in Manchester posing as a recruit and covertly filmed fellow officers behaving in a racist manner (Barnett, 2003). In one example, a recruit put on a Ku Klux Klan-style hood at a national training centre and simulated the beating of an Asian colleague. Thus, racist attitudes and behaviours may, at least in part, account for the over-representation of certain minority groups in violent crime statistics.

There has been some debate about the reasons for race differences in the expression of violence, the most probable seems to be that the differences can be accounted for by race differences in risk factors such as poverty, residing in a 'bad' neighbourhood, single-parent families, teenage mothers, poor parental supervision, harsh physical punishment, low school attainment and so on (Farrington, 2001).

In the general literature concerning violence in the workplace there is little mention of race, although some research has looked at ethnic group and victimisation at work (e.g. Hopkins, 2002). When considering 'perpetrators' of violence, the issue of race would appear to be rather a 'red herring' as once other risk factors are controlled for the association is lost.

3.2.4.4 Mental disorder

Another factor which could be considered to exert a long term influence on an individual is mental disorder. The belief that people with mental health problems are predisposed to behave in a violent manner has intensified over the last few decades, perhaps in part due to media coverage of a number of homicides committed by such individuals. Factors associated with violent behaviour in this group have been the subject of a good deal of research in recent years following the finding that clinicians' predictions of risk of violence are really quite poor (Monahan, 1981).

Stereotypically, schizophrenia is associated with violent behaviour. Monahan et al. (2001) however, found that when considering individuals with major mental disorder in their sample, those with a diagnosis of schizophrenia were actually at *lower* risk of violence. A key factor influencing violence in this group was the association of mental disorder with substance misuse, a finding which is also reported by a range of other researchers (e.g. Arseneault, Moffitt, Caspi, Taylor & Silva, 2000; Swartz, Swanson, Hidfay, Borum, Wagner & Burns, 1998). Whilst delusional beliefs may lead to violence in some cases, the presence of such symptoms does not generally predispose individuals to act in this way - although *non*-delusional suspiciousness does (Arseneault et al, 2000). In the case of hallucinations, Monahan et al. (2001) found that, whilst the presence of command hallucinations per se was not associated with violence risk, such risk was elevated if the voices commanded violent acts. It would appear that mental disorder can have implications for violence potential, but this is not as clear cut as it has been suggested.

Although this research has been conducted exclusively in workplace settings where people with mental health problems are cared for, there is potential relevance to other work environments. Clearly, if non-delusional suspiciousness is influential, this may have implications outside of a healthcare setting. Despite this, such factors have not been directly considered in the general literature on violence in the workplace. This factor may, however, be related to the issue of proneness to feeling mistreated by the employing organisation and attitude toward revenge which some research has addressed (e.g. Douglas & Martinko, 2001). It has been found that some people are more likely than others to feel that they have been mistreated and subsequently act in a violent manner (Skarlicki, Folger & Tesluk, 1999).

3.2.4.5 Personality

A range of personality variables have been associated with violent behaviour including hyperactivity, impulsiveness, poor behavioural control and attention problems (Farrington, 2001). Farrington (1998) found that high daring or risk-taking, attention difficulties, low non-verbal IQ, and low school attainment at age 8-10 all predicted both self-reported violence and criminal convictions for violent offences. In contrast, it was found that high anxiety/nervousness was negatively associated with violence.

It has also been suggested that individuals with specific personality disorders, in particular 'psychopathic personality disorder', have an elevated risk of displaying violent behaviour. In support of this it has been found that high scores on the Hare Psychopathy Checklist (PCL-R) (Hare, 1980, 1991) are associated with violent recidivism in prisoners (e.g. Hart et al., 1988) and mentally disordered offenders (e.g. Rice & Harris, 1997). There has been some criticism of the assumptions of the research in this area. Toch (1998) for example, points out that the association is largely accounted for by the behavioural items on the PCL-R rather than the emotional items thus calling into question the association with psychopathy per se. Despite such

observations the association is generally accepted in the field of criminology (Monahan et al, 2001) although whether or not this is a causal association is unclear.

Some attention has been given to the role of personality factors in the general workplace violence literature. Macintyre, Ronken and Prenzler (2002), for example, report on a study carried out in the Police Department in the State of Victoria Australia where they have been using the Minnesota Multiphasic Personality Inventory (MMPI and MMPI-2) on all police recruits since 1985. The research looked at whether or not the tool could predict 'unethical' behaviour by the police, such as 'susceptibility to aggression'. A total of 445 officers were identified as having an undesirable complaint history and of these, 149 males with appropriate MMPI-2 test results were examined. This sample had 1,018 complaints made against them and were compared with a matched control group. A discriminant analysis was conducted which produced a predictive model that, overall, correctly classified 81.9% of all cases. Whilst the predictive model correctly classified 93.0-95.3% of the 'undesirables', it could only correctly categorise 61.9-68.8% of the 'desirables'. Six scales were required for Macintyre et al.'s predictive model: schizophrenia, mania, psychopathic defensiveness, hypochondriasis defensiveness, psychasthenia, and hypochondriasis. In addition, three new scales were added which comprise computations of combinations of various scales such as defensiveness and infrequency. This study builds on a number of other studies which look at the MMPI/MMPI-2 and police officer behaviour which, taken together, suggest that certain predisposing personality traits, as measured by the MMPI/MMPI2 can be associated with unacceptable behaviour. However, as Macintyre et al. point out, other factors such as organisational culture and opportunity have a large, and perhaps more powerful, influence on the expression of such behaviour.

Another individual characteristic which may be associated with violent behaviour is that of high trait anger. It seems intuitive that anger is

associated with violence but although there is a theoretical relationship between the two, the nature of the relationship has proved difficult to define. Novaco (1994) suggests that the connection between anger and violence is two-way, with each influencing the other; it can be seen that violence may reduce feelings of anger or intensify them (Konecni, 1975). Monahan et al. (2001) found that psychiatric patients with high anger scores on the Novaco Anger Scales (NAS) (Novaco, 1994) when they were hospitalised were twice as likely as those with low anger scores to commit a violent act following discharge. However, the effect was not large and they suggest that anger should be seen as a factor which increases the risk of violence occurring but cannot fully account for it.

Being angry does not mean that an individual will act in a violent manner and, as noted previously, some acts of violence are carried out in the absence of anger. Thus the relationship between anger and violence is complex. Within the workplace generally, some attention has been paid to the importance of anger in the development of violent situations. Gibson and Barsade (1999), for example, looked at employees who report higher levels of chronic anger, as defined by ongoing generalised feelings of anger toward other individuals in the workplace, and those who do not. They found that those in the former group were less likely to feel that they had been treated with dignity and respect by their employers, and more likely to feel that they had been betrayed by their employers. On the basis of this finding, Douglas and Martinko (2001) hypothesised that there would be a positive relationship between trait anger and the incidence of violence in the workplace, which is indeed what they found.

3.2.4.6 Cognitive Processes

When faced with the opportunity, an individual's cognitive processes have an influence on whether or not they actually exhibit violence. Beck (1999) emphasises the role of biased thinking and cognitive distortions in violence and claims that an individual's belief that he or she has been wronged is of

central importance. He views the aggressor as making arbitrary, often distorted, interpretations of the motives of others.

The role of cognitive schemata in violence has also been highlighted. Huesmann (1988, 1998) claims that violent behaviour is a form of social behaviour which is controlled by behavioural repertoires developed during early socialisation. 'Scripts' contain representations of the characteristics of situations, expectations concerning the behaviours of those involved, and the consequences of different responses. These scripts influence how an individual will respond in certain situations. Scripts will be activated by pertinent cues and the individual will respond according to the content of their script. In this sense they can be seen to have a short-term effect on violent behaviour, however they can also be seen to have more long-term pervasive influences. They include normative beliefs which influence the person to behave in a socially appropriate manner and thus, for example, children may develop the normative belief that it is acceptable to retaliate with violence if attacked by a peer in a fight but not if hit by an adult in a disciplinary situation. Where these normative beliefs are not developed, it is argued that an individual may exhibit inappropriate violence.

3.2.5 General Critique

Many theories concerning the causes of violence tend to focus predominantly on the individual 'perpetrator'. Although this gives insights into what makes particular individuals more prone to behaving in a violent manner, it could be criticised for failing to take into account the potential influence of other parties who may be involved in the violent interchange, as well as the impact of situational and environmental factors. Consideration of others involved in the encounter is important, not least because it is not always clear who the 'perpetrator' is and who is the 'victim' in a given violent interchange as the individual 'actors' in the scenarios may have quite different views about which of these roles they are in (Beck, 1999). Violence is an interpersonal event which the perpetrator may view the victim as

contributing to (Gudjonsson, 1999). Thus a nurse may see him/herself as the victim of a patient attack whereas the patient may see him/herself as the victim of that nurse's inhumane treatment and therefore carrying out a justified retaliation. In addition, the roles may fluctuate during the interaction with power oscillating between the parties involved (Whittington & Balsamo, 1998). The fact that much of the literature considers the perpetrator-victim distinction to be clear causes problems when attempting to apply the research to the complex issue of workplace violence.

Another complication arising from much of the literature as it stands is that there is an implication that the relationship between a given cause and violence is linear. Thus there is a lack of acknowledgement of the potential interaction of various factors in terms of violence risk potential. Monahan et al. (2001), in their study of mentally disordered offenders, found that individual risk factors interacted in particular ways to heighten or lower risk. Thus they argue that the relationship of different factors to each other must be taken into account when considering the violent behaviour of individuals. The research conducted by Monahan and his colleagues highlights the complex nature of violence emphasising the fact that uni-dimensional models of causality are too simplistic.

When considering literature which specifically focuses on causes of violence in the workplace, there is a lack of reference to the substantial body of research into the causes of violence generally. There is an overriding tendency to concentrate on identifying the characteristics of work settings where violence is more prevalent and the types of violence including brief references to 'perpetrator' and 'victim' characteristics. Some researchers, however, have begun to examine specific workplaces where violence is frequently encountered, and to investigate differences in staff's cognitive, emotional and behavioural responses which can serve to escalate or de-escalate situations (e.g. Sharrock, Day, Qazi & Brewin, 1990). One such body of research, which has used attribution theory as it's basis is of interest, not only because it acknowledges the role of different parties involved in a

violent interchange, but also because it sees violence as just one potential response. Social-cognitive approaches acknowledge the role of an individual's interpretation of the causes of a situation in the subsequent decision to act in a particular way. Perhaps a limitation of much of the research into the causes of violence is that it does not take into account the range of response options that may be selected by individuals in a given situation. Thus a nurse, for example, when confronted with a conflict situation involving a patient may choose to help, neglect, or retaliate. An understanding of the factors which influence such choices is important because it could provide an insight into what makes an employee good or poor at managing patient violence.

3.3 Attributions, helping behaviour and violence

When confronted with a potentially violent situation, an individual may respond in a number of different ways depending on such factors as the social positions of those involved, the nature of the situation, and the histories of individuals concerned. Decision to act may be influenced by the relationship between the parties, perceived costs and benefits to all concerned, cultural values and norms, the severity of the need for aid, the availability of other potential help providers, and so on. The particular circumstances or situation may help to determine which of these factors will take a primary role. For example, if the individual requiring help is someone with whom the nurse has a close relationship, then factors such as severity of need are likely to be less salient than if the patient requiring help is not known. However, there is evidence that one particularly important factor that influences the decision to help or retaliate is the perceived cause of the need (e.g. Piliavin, Rodin, & Piliavin, 1969; Berkowitz, 1969; Barnes, Ickes & Kidd, 1979; Brewin, 1984; Sharrock et al., 1990).

Weiner's (1980a, 1985, 1995) theory of social motivation has proven particularly influential in the general area of helping behaviour. This takes perceived cause of need as it's focus and has been applied to a variety of

areas, including both helping behaviour and violence which he postulates lie at the heart of the domain of social motivation. Weiner (1995) criticises theories that deal with helping and violence as separate issues focusing, for example, on 'aggression' whilst ignoring 'altruism'. He argues that these behaviours are in fact two sides of the same coin. Weiner suggests that in order to have validity and generality, a theory of social motivation must be able to assist us in our understanding of what motivates an individual staff member to help rather than to neglect or retaliate in potentially violent situations.

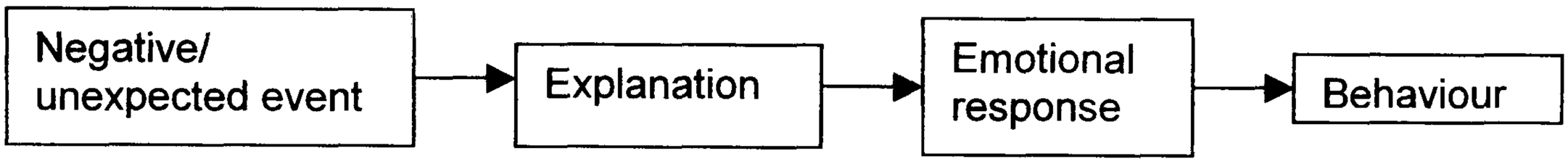
3.3.1 Weiner's Theory of Social Motivation

Attribution theory is concerned with how people explain and make sense of events in their worlds (Heider, 1944, 1958). According to the theory, people search for explanations for such events in order to attain cognitive mastery of the environment (Kelley, 1967). Heider (1958), the acknowledged founder of attribution theory, proposed that action depends on two sets of conditions: those within the person and those within the environment. Rotter (1966) subsequently classified individuals into 'internals' and 'externals' in terms of whether or not they viewed the causes of outcomes as due to factors within themselves or other people/situations. Thus the internal-external attributional dimension was born. Following this, Weiner and his colleagues (Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum, 1971) recognised that the variability of a cause over time was also an important consideration. They therefore proposed that a stable-unstable dimension be included in attributional research. Further work led Weiner (1979) to create the additional dimension of controllable-uncontrollable, since whether or not a cause is perceived to be under volitional control was identified as an important further consideration.

Using the dimensions described above, Weiner (1985) proposed an attribution-emotion-action sequence which forms the basis of his theory of social motivation. The premise of this is that the way a person explains an

event, particularly a negative or unexpected one, is seen to be an important mediator of the emotional response to the event and this emotion, in turn, influences subsequent behaviour (see Figure 3.2).

Figure 3.2 Attribution-emotion-action sequence



Weiner and his colleagues, (Weiner, Russell and Lerman, 1978; Weiner, 1986, 1990) investigated the role of attributions in the production of different emotional responses. Weiner (1986) described the roles of each of the underlying causal properties or dimensions of attributions in the following way. In terms of locus (the internal-external dimension), Weiner claimed that where success is attributed to internal causes such as ability or effort (*e.g. I studied really hard to pass that exam)* greater self-esteem or pride will result than when success is attributed to external factors (*e.g. I was really lucky that they set easy questions*). When considering expectation of success or failure in the future (stability of cause) the emotional response of hopelessness is experienced when failure is attributed to internal and stable causes (e.g. *I failed the exam because I am stupid)*. Finally, where personal failure is seen to be controllable by others (e.g. *they didn't set the right questions)*, then the likely affective response is anger, whereas if it were seen to be uncontrollable (e.g. *they didn't know we hadn't studied algebra)* one might feel more sympathetic to that person.

In Weiner's (1985) model, the emotional response of the individual is postulated to influence subsequent behaviour. For example, attributing a negative outcome to internal and controllable factors may lead to feelings of guilt and to attempts to avoid carrying out similar behaviour in the future. Attributing a negative outcome to external and uncontrollable causes on the

other hand, may lead to feelings of anger and quite a different behavioural response.

3.3.2 Theory of social motivation and help-giving

When exploring healthcare staff's responses to violent patient behaviour it is important to consider various behavioural options open to them. These include help-giving and retaliation. What influences a member of staff's decision concerning which of these strategies to adopt is of interest to this thesis.

A number of early studies influenced the development of Weiner's (1985) attributional model of helping and these are useful illustrations of the model in practice. In one study Piliavin et al. (1969) carried out an experiment in which an actor, appearing to be either drunk or ill, fell down in a subway. The researchers looked at whether or not fellow subway riders attempted to help the actor. They found that members of the public were more likely to offer help in the condition where the actor played the part of the sick person rather than the drunk. Furthermore, where help was offered to the actor in the drunk role, it was offered less quickly than when help was offered to the actor in the sick role. The researchers concluded that individuals weighed up the potential costs of helping and were less likely to help the drunk person because the costs were considered too high. For example the drunk person may be aggressive, resist help, and so on. Furthermore, Piliavin et al. assumed that those considered as partly responsible for their plight would receive less sympathy and thus less help from observers, although they did not actually measure affect directly. Also, the issues of internality and controllability were not clearly delineated in this study. Another issue here is that the observers were identifying causes of another person's behaviour, not their own.

Berkowitz (1969) also examined help giving. In his experiment, each participant was required to request help from another (who was in fact a

confederate); in one condition the need was caused by experimenter error ('the experimenter gave me the wrong paper'), and in another by the confederate ('I took it sort of easy'). Berkowitz found that help was more likely to be offered when the cause was experimenter error. Thus it was concluded that where need is attributed to factors external to the individual, people were more willing to help. As with the Piliavin et al. (1969) study, the issue of controllability was not considered, however.

By holding the locus dimension constant and manipulating controllability, Barnes et al. (1979) found that there was not a simple association between the internal-external dichotomy and help giving behaviour. They found that in addition to internality, the controllability of a cause was an important determinant of helping behaviour. Help was more likely to be offered when a cause was internal and uncontrollable (lack of ability) than internal and controllable (lack of effort). Barnes et al. reinterpreted the data from the Piliavin et al. (1969) study in the light of their findings. They suggested that the public may not have been as willing to help the 'drunk' actor because the 'drunk' is perceived to have more control over the cause of their condition than the sick person.

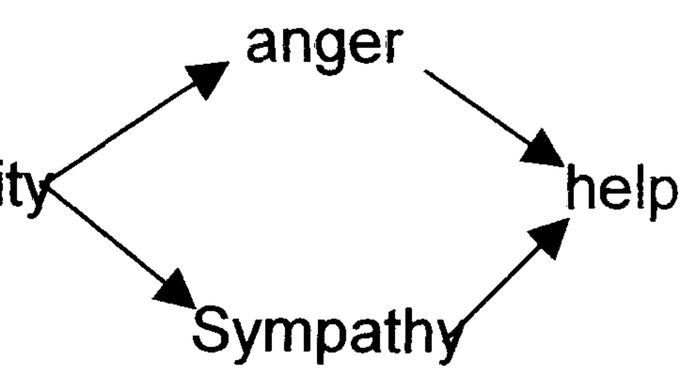
Developing this further, Weiner (1980b) asked students about intentions to lend class notes to other students. In this experiment, three dimensions of causality were manipulated (locus, stability and controllability). Replicating Barnes et al. (1979), Weiner found that help was reported unlikely only when the cause was internal to and controllable by the subject (lack of effort). From this and previous findings, Weiner concluded that there is an association between a dimension of causality (controllability) and a behavioural consequence (help versus neglect).

Weiner (1995) proposed five models to illustrate the possible mechanisms by which attributions influence emotions and behaviour (see Figure 3.3). The first of these models proposes that perception of causality of an eliciting stimulus is made. This influences the emotional response of the individual

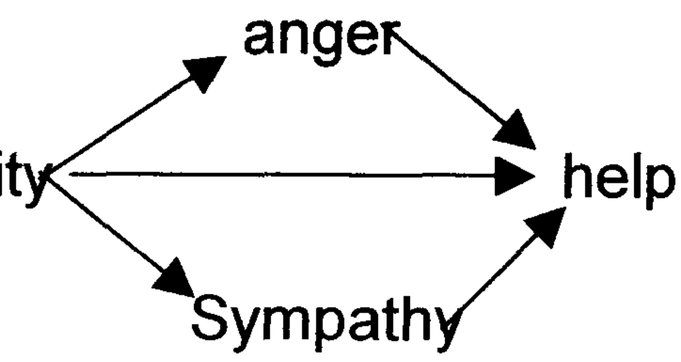
(anger or sympathy) which, in turn, influences the behavioural response (to help or not). This model would predict, for example, that a nurse who perceives the cause of a violent incident to be uncontrollable by the patient is likely to experience sympathy and this in turn leads to helping behaviour. The second model proposes that thoughts can directly influence action. In this example, where a nurse perceives the cause of the violent incident to be uncontrollable by the patient they may be influenced to help, regardless of their emotional response. The third model proposes an inhibitory relationship between anger and sympathy. This implies that where the nurse involved in the violent interchange has feelings of sympathy to the patient, they are unlikely to experience anger, and vice versa. The fourth model suggests both a direct influence of thoughts on action and an inhibitory relationship between anger and sympathy. This is essentially an amalgamation of models two and three. In model five, the eliciting stimulus is seen as having a direct impact upon action e.g. a nurse may help an 'unworthy' patient because it is part of his/her role. Thus training and/or experience may enable the nurse to override the influences of cognitive and emotional factors. It should be noted here that in all of the models, the perceived control refers to the target (other person) and not to the perceived control of the individual making the attribution.

Figure 3.3 Weiner's proposed models of helping behaviour (1995)

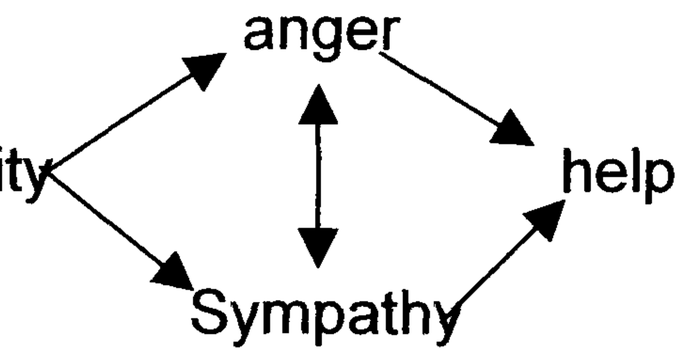
1. Eliciting stimuli → perceived controllability



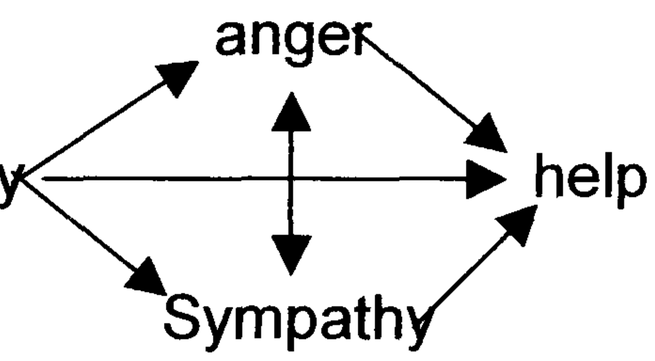
2. Eliciting stimuli → perceived controllability



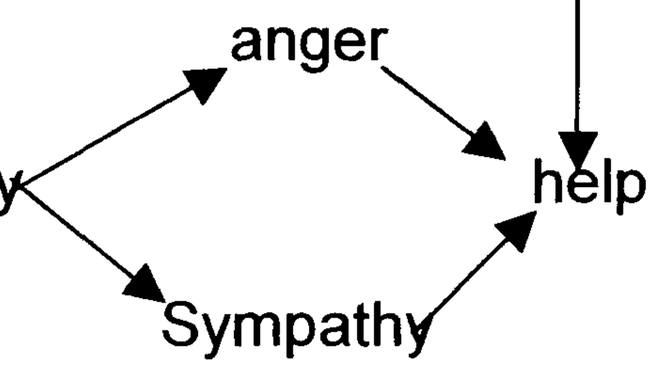
3. Eliciting stimuli → perceived controllability



4. Eliciting stimuli → perceived controllability



5. Eliciting stimuli → perceived controllability

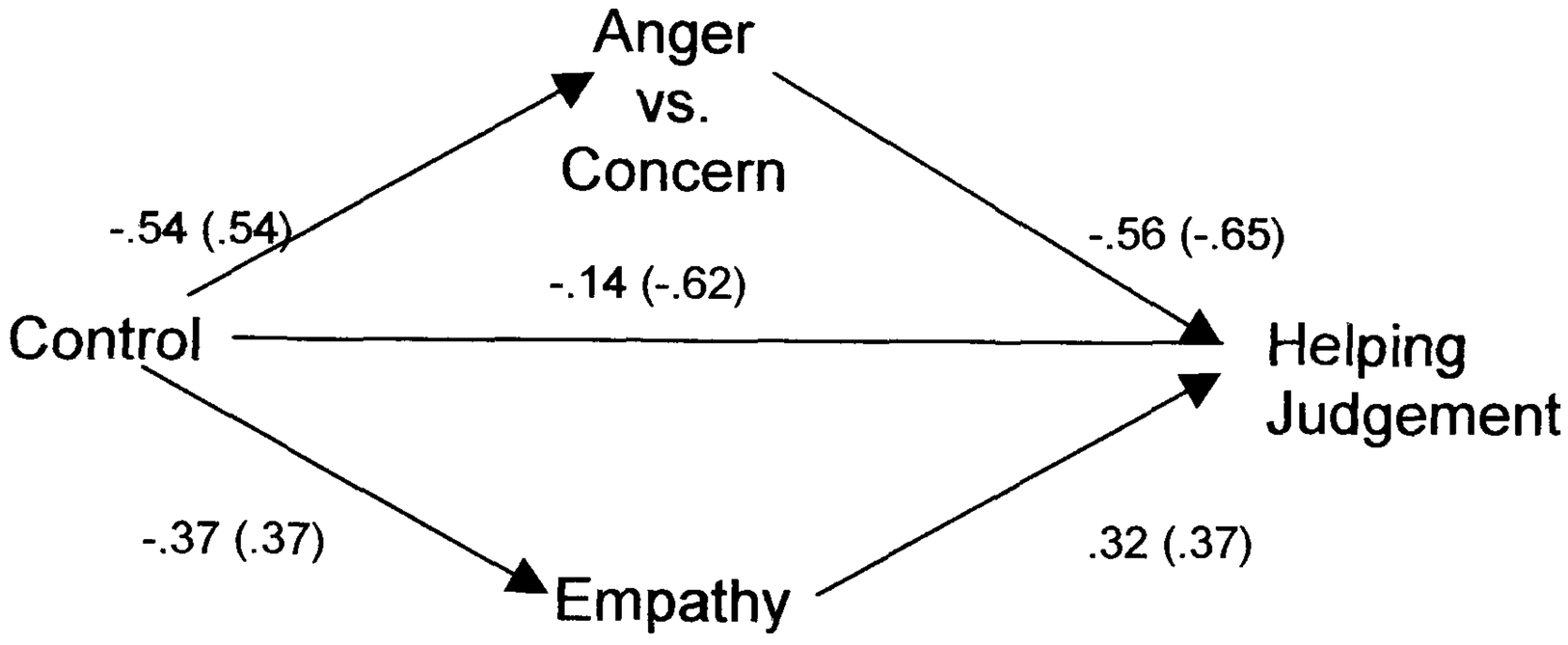


In order to test these models, Weiner (1980b) revisited the research carried out by Piliavin et al. (1969) (described earlier). He presented participants with scenarios in the form of vignettes involving drunk versus ill people, and asked them to describe their feelings (emotions) about each of the different situations. He found that 27% of the feelings directed towards the drunk person described in the vignettes were negative whilst only 3% of those directed to the sick person were. However, sympathy was described in 46% of cases involving the ill person and 30% of those involving the drunk person. In a further study, Weiner presented the same scenarios but on this occasion asked participants to rate how controllable by the target they perceived the cause of the need to be, their feelings of sympathy and concern, their emotions of disgust and distaste, and the likelihood of providing help. There was a negative correlation between controllability and sympathy, and a positive correlation between controllability and negative emotions, which in turn were negatively associated with intentions to help. Sympathy correlated positively with reports of intentions to help. A partial correlation of the data led Weiner to conclude that controllability was the distal and emotion the proximal determinants of reported intentions to help. However, it should be noted that actual behaviour was not examined. The results of Weiner's study provide partial support for Model 2 as a weak association was found between perceptions of control and action.

Further support for Model 2 was provided by Meyer and Mulherin (1980) who carried out a study using hypothetical scenarios of an out of work acquaintance requesting financial assistance, that controlled for locus, stability, and controllability. Thus the causes of the unemployment were varied, some being internal and controllable (e.g. the person was laid off because of lack of effort on the job), while other causes were uncontrollable (e.g. the person could not work because of health reasons). Participants were required to rate the degree to which they would experience various affective states in each of the given situations and also the likelihood that they would assist financially. It was found that perceiving the person as

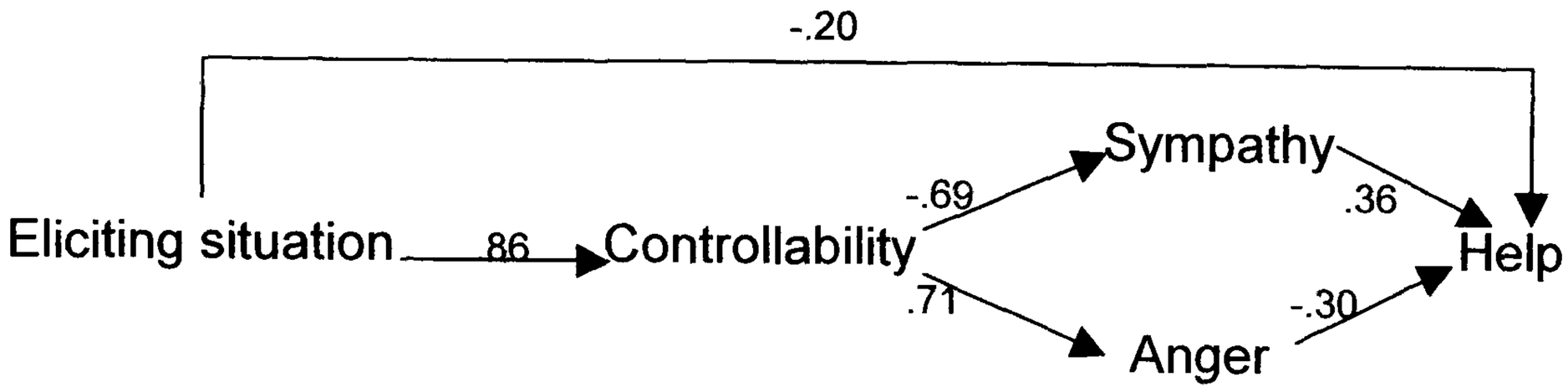
having control over the cause of unemployment was positively associated with anger, and negatively with empathy and help. Anger in turn related negatively to helping whereas empathy related positively to helping judgements. Figure 3.4 illustrates the path analysis results. Values in parentheses are correlations between the variables, and values prior to parentheses are path coefficients.

Figure 3.4 Simplified attributional model of helping behaviour with results from path analysis (Meyer & Mulherin, 1980, p207)



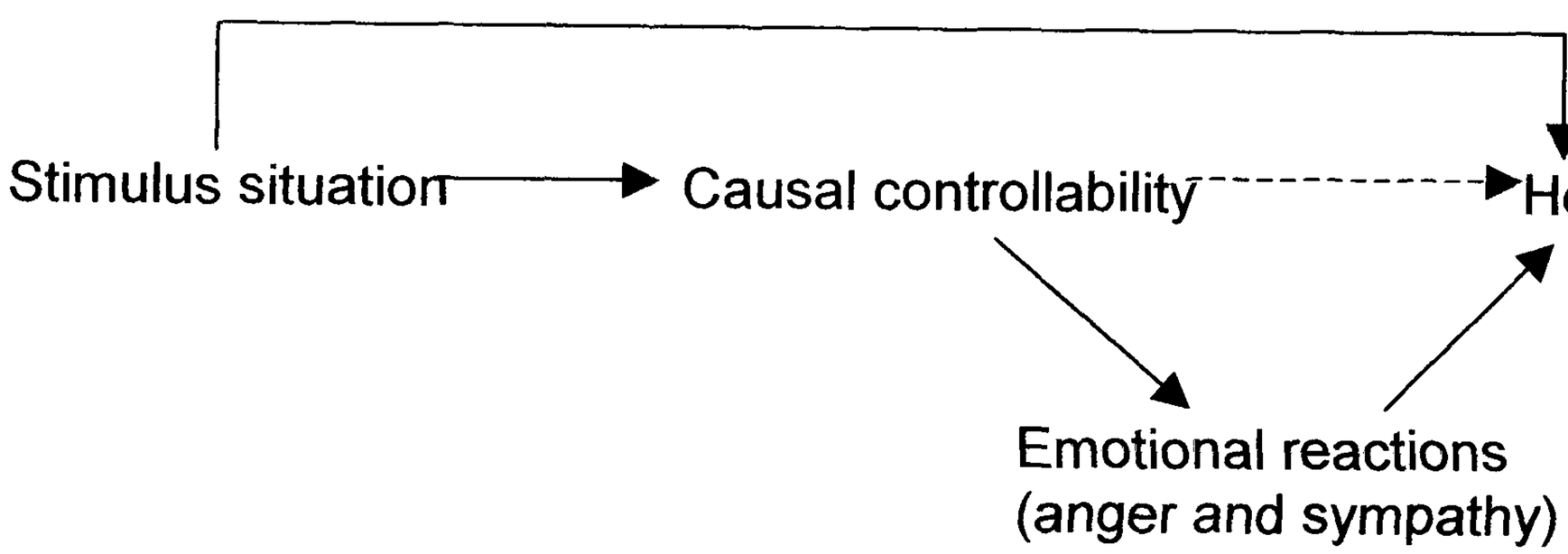
Meyer and Mulherin's results are therefore most consistent with Model 2 which includes a direct path between thinking and action. Subsequent studies further investigated the attribution-emotion-action sequence using the Piliavin et al. (1969) and Barnes et al. (1979) scenarios. Reisenzein (1986) and Schmidt and Weiner (1988) used structural analysis and path analyses to examine the relationships between the sequence elements and test the various models. These researchers basically replicated the previous studies but used more sophisticated statistical analysis. They found that Model 5 best accounted for their results. Sympathy related positively and anger negatively to judgments of helping. The addition of a path directly from control to help did not increase the prediction of help giving. Figure 3.5 illustrates findings from the Reisenzein (1986) data.

Figure 3.5 Simplified structural analysis of the determinants of help-giving in subway scenario (Reisenzein, 1986)



Weiner (1995) proposed a sixth model to take into account the findings which offered support for models 2 & 5. This is illustrated in Figure 3.6.

Figure 3.6 Weiner's Model 6



In this figure, the dashed line from causal controllability illustrates a weak or tentative relationship. Weiner acknowledged that further investigations are required in order to test his revised model[4].

When considering findings from research in this area it is important to recognise that many of the studies are similar (e.g. they use the same topics). This means that the extent to which the results are able to be generalised to other situations has not been investigated. In addition, the

[4] The relevance of this model for the present thesis is discussed in more detail in section 3.2.5.

studies are predominantly laboratory based, focusing on how people say they would feel and behave in relation to hypothetical scenarios rather than how they *actually* feel and behave in real life situations. Finally, perceptions of control for a target person, rather than perceptions of own control, have been studied exclusively. This ignores the potential influence of perceived control for self on affect and behavioural reactions i.e. how much influence an individual perceives him or herself to have over the causes of an incident.

3.3.3 Theory of Social Motivation and Violence

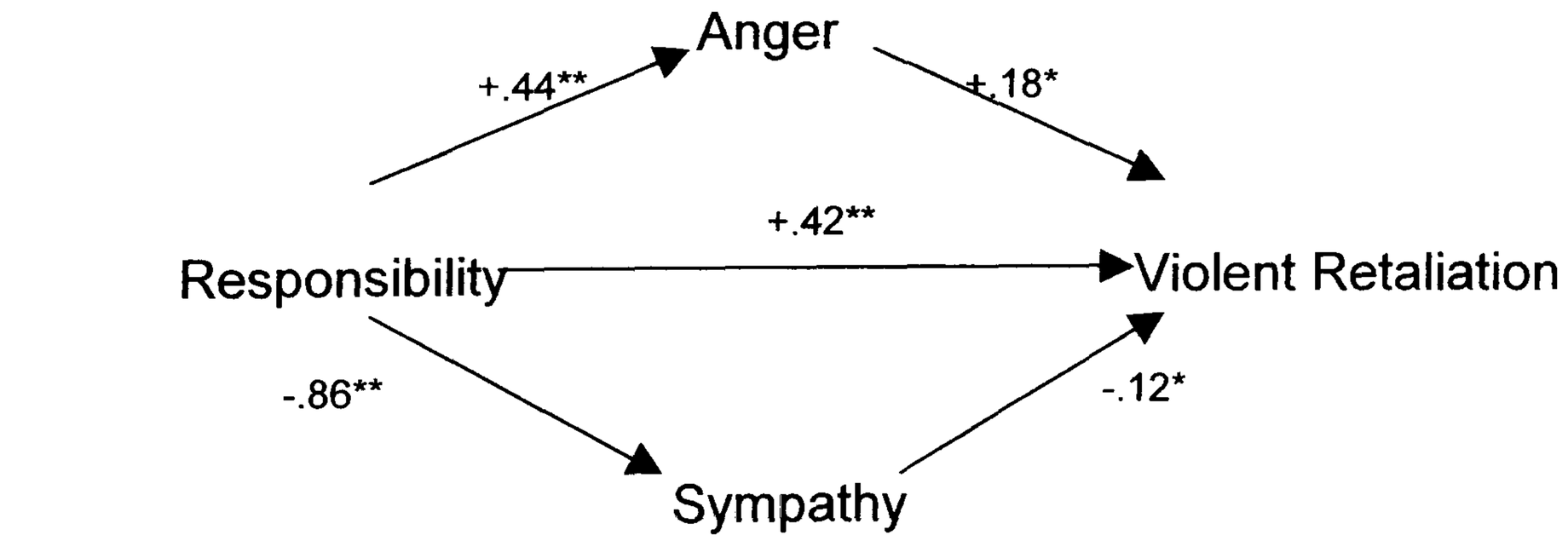
Weiner (1995) argues that retaliatory violence is subject to the same theoretical analysis and psychological laws applied to helping behaviour. He suggests that when an individual is a victim of a harmful act, that individual will attempt to determine the cause of that act. Where the act is perceived to be under the control of the perpetrator, and where there are no mitigating circumstances, then anger will result. This in turn will lead to increased likelihood of hostile retaliation.

A number of laboratory experiments carried out in the 1960's and 1970's found that perceived intentions of harm doers were associated with levels of anger reported by participants. Nickel (1974) for example, gave 'high' and 'low' electric shocks to subjects who believed these to have been delivered by a co-participant. In fact, the co-participant either did not exist or was a confederate. The experimenter made it known to participants that a switch had been improperly set which meant that the level of shock given was the opposite to that intended by the other participant. Thus individuals either had a higher or a lower shock than they believed was intended. It was found that the perceived intention of the participant, rather than the level of the shock actually received, influenced reported angry feelings. Thus where the 'intended' shock was high but the actual shock was low, the participant expressed more anger than when the reverse was true. Perceived intention also influenced, in the expected direction, the level of retaliation when the participants believed that they were giving shocks to the other party. Whilst

this research appears to support Weiner's theory, the results are not unequivocal. The attribution-emotion-action sequence is not the only way of interpreting the results since aggressive retaliation may be independently associated with the perception of the aggression as intentional.

Betancourt and Blair (1992) attempted to look in more detail at the roles of both anger and sympathy as mediators of hostile behaviour. Participants considered two hypothetical scenarios. In one, a car is accidentally damaged by a thrown rock and, in another, the car is intentionally damaged. Scales were then completed concerning 1) perceived controllability and intentionality, 2) feelings of anger, pity, and sympathy at the rock thrower, and 3) the likelihood that they would retaliate with violence. In the scenario where the car was purposely damaged, greater controllability and intentionality were reported, as were feelings of anger. Furthermore, a more violent reaction was reported likely than when the damage to the car was accidental. The question of sequence was addressed using path analysis and it was ascertained that the proximal antecedent to the reported intention to use violent retaliation was emotion and the distal antecedents were the attributions. Their findings best fitted Model 2 (see Figure 3.3). This is illustrated in Figure 3.7.

Figure 3.7 Structural equation analysis of the determinants of violent reactions (Betancourt & Blair, 1992)



* = p < .05

** = p < .01

Work focusing on individual differences in perception of hostile intent has provided further support for the general attribution-emotion-action theory. A series of studies carried out by Dodge and colleagues (see Dodge & Crick, 1990) with aggressive and non-aggressive children, are influential in this area. The first study (Dodge, 1980) involved a competitive jigsaw puzzle task. The children were led to believe that their puzzle had been destroyed by another child. There were three different conditions implying different intent by the destroyer: intentional, unintentional, and ambiguous. It was found that under the ambiguous condition, aggressive children were more likely than non-aggressive children to assume hostile intent and thus act in a retaliatory manner.

Although the research conducted by Dodge and colleagues points to a link between attributions and behaviour (e.g. where children attributed hostile intent to another they were more likely to retaliate), the work did not consider the mediating influence of anger. Graham, Hudley and Williams (1992) attempted to fill this gap in their study of aggressive and non-aggressive adolescents. They presented the participants with vignettes which included a negative experience and asked them to imagine themselves in the situations. Information concerning the intention of a hypothetical peer involved in the incident was provided such that the peer's behaviour was: prosocial, accidental, ambiguous, or hostile intent. The participants were then required to indicate attributions of intent, say how angry they would feel if this happened to them, and say how they thought they would behave in relation to degree of hostile retaliation. It was found that aggressive adolescents were more likely to say that the peer acted with hostile intent, particularly when the scenario was ambiguous. In addition, these adolescents expressed greater anger and were more likely to endorse hostile retaliation. Path coefficients confirmed the aggressive intent attribution → anger → hostile retaliation sequence. It should be borne in mind, of course, that as with much of the research in this area, this was a study using hypothetical scenarios and reports of how people thought they would feel

and act, rather than actual feelings and behaviours in relation to real life situations.

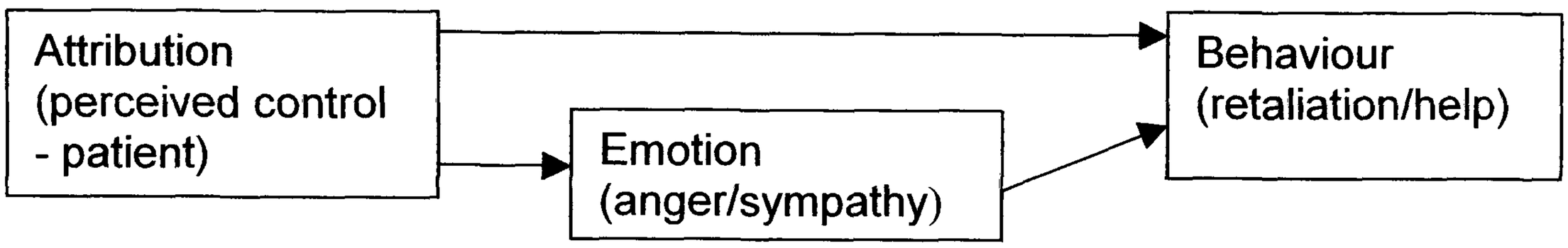
In terms of violence, Weiner's (1995) general model has been applied across a range of situations including: children's violent behaviour (e.g. Dodge, 1980), discipline responses (e.g. Pinderhughes, Dodge, Bates, Pettit & Zelli, 2000), teacher responses to disruptive pupils (Poulou & Norwich, 2002), child abuse (e.g. Graham, Weiner, Cobb & Henderson, 2001), sexual offending (e.g. McKay, Chapman & Long, 1996), spousal abuse, and intergroup and organisational conflict (e.g. Bizman & Hoffman, 1993). The model has potential for aiding our understanding of violence in the workplace. In particular, it may help explain why some situations escalate and others de-escalate.

3.3.4 Developing Weiner's (1995) model

In order to apply Weiner's (1995) model to violence in healthcare settings, some further explanation and development is required. The example of a healthcare worker dealing with a violent situation involving a patient will be used for illustration purposes. Weiner's model predicts that where the worker perceives the situation to be within the control of the patient, that worker will experience feelings of anger which will lead to increased likelihood of a retaliatory response (e.g. use of punitive strategies). Alternatively, where the worker perceives the incident to be uncontrollable by the patient, that worker will feel sympathetic and this will lead to an increased likelihood of help-giving behaviour (e.g. provision of medication). There is a possible direct link between attributions of control and behaviour such that perceiving the incident as controllable by the patient may lead directly to retaliatory behaviours. Similarly, perceiving the incident to be uncontrollable by the patient may lead directly to help-giving. Negative relationships exist between high perceived control for patient and sympathy, low perceived control and anger, anger and sympathy, and retaliation and help. Figure 3.8 illustrates the model, as applied to healthcare workers dealing with violent

incidents involving patients (showing positive relationships only). This is essentially Weiner's (1995) model six, excluding the eliciting stimulus (see Figure 3.6) but explicitly shows the option of retaliation.

Figure 3.8 Weiner's (1995) attribution-emotion-behaviour model 6 as applied to healthcare workers dealing with violent incidents involving patients[5]



3.3.5 The application of the model in health care settings

With up to three quarters of all patients in medium secure settings exhibiting violence at some point during their detention (Gudjonsson et al., 1999; Torpy & Hall, 1993), healthcare staff working in such settings are frequently required to provide aid in circumstances which would not usually be associated with help giving behaviour. It is clear that there are individual differences in terms of staff's success in de-escalating conflict situations (Ray & Subich, 1998) and, at times, violence is actually exhibited by the staff themselves (see Shepherd, 1996). What motivates a staff member to help rather than to neglect or retaliate when confronted with violent patient behaviour is unclear. Some researchers have seen the potential of Weiner's (1980a) theory of social motivation to explain this. Research investigating attributions in clinical settings has examined the types of attributions made by care staff and the relationships between these and their emotional and behavioural responses as well as clinical decision making (e.g. Sharrock et al., 1990; Cottle, Kuipers, Murphy & Oakes, 1995; Silvester, Bentovim, Stratton & Hanks, 1995; Dagnan, Trower & Smith, 1998; Stanley & Standen,

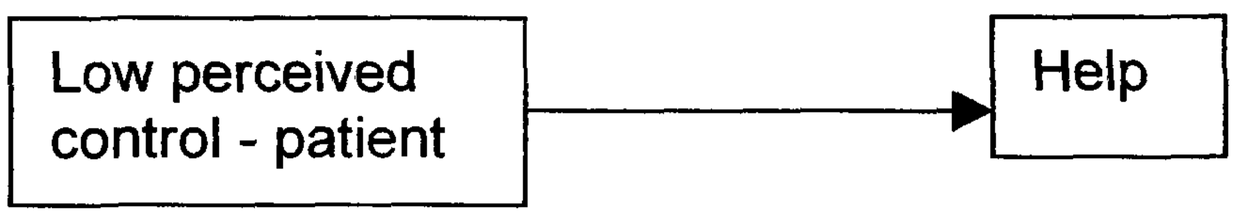
[5] This model is developed further in chapters five and six.

2000). In a review of the literature Lopez and Wolkenstein (1990) draw attention to the importance of Weiner's (1986) attributional model of helping behaviour to this area. They suggest that the perceived causes along the dimensions stable-unstable and controllable-uncontrollable are particularly applicable to clinical judgements.

Although not all research in this area directly evaluates the applicability of the model depicted in Figure 3.8 (which is based on Weiner's 1995 model), there is a growing body of research concerned with the associations between attributions made by healthcare staff and their behaviour towards their patients. As early as the 1960's researchers were interested in how staff's understanding of illness could influence how they treated patients. Sudnow (1967), for example, looked at the background to individual admissions and attempts made to resuscitate patients in an Accident and Emergency department. Strikingly, it was found that individuals who might be considered to be more 'responsible' for their admission to hospital, such as drug addicts, suicide victims, and prostitutes, were pronounced dead more quickly than other, more 'respectable' individuals. Whilst this is an interesting early finding, Sudnow did not actually examine staffs' attributions about the patients' reasons for admission, but rather made assumptions based on the individual's histories. Several decades later however, Brewin (1984) also found that medical students indicated that they would be more willing to engage in helping behaviour (prescribing medication) when life events preceding referral for psychiatric services were regarded as uncontrollable rather than controllable by the patient. Thus, the quality of medical care may be partly dependent on the healthcare professional's moral evaluation of the patient (Weiner, 1995). Although Brewin was interested in medical staff's attributions about patient illnesses, he studied reported intentions and not actual behaviour. Another difficulty with interpretation of this study arises from the fact that the participants were medical students who are not able to actually prescribe medication. The extent to which their lack of training and experience influenced their responding is unclear. Nonetheless, this study paved the way for further research into the attributions of healthcare staff and

their behaviour in the workplace. When considering Weiner's (1995) model as depicted in Figure 3.8, the work of Brewin is relevant to the pathway between attributions of control and helping behaviour. The issue of the alternative behavioural response of retaliation was not tackled, nor were staff's emotional responses investigated. It should be noted that the study did not involve patient violence, but looked health care staff's decisions to help or not help patients in different clinical situations.

3.9 Illustration of model tested by Brewin (1984)



A number of studies published subsequently, build on the results of Brewin's (1984) research including Quinsey and Cyr (1986) who proposed that attribution theory provides an appropriate framework in which to study clinical decisions concerning dangerousness and treatability. Based on this work, Reid and Millard (1997) examined attributions made by care staff for the causes of convicted patients' index offences which led to their detention at a maximum security hospital. Participants were required to rate the causes of the crimes such as murder, attempted murder, aggravated burglary, grievous bodily harm, actual bodily harm, kidnapping and indecent assault, on the Causal Dimension Scale (Russell, 1982). Information concerning perceived dangerousness and treatability was also collected. It was found that when the cause of the index offence was perceived by healthcare staff to be highly stable and controllable, patients were rated less treatable. The implication here is that less effort will be expended in trying to assist patients who are deemed to have some control over their negative behaviours. However, this is really supposition as neither intentions to help nor actual behaviour were examined in this study. Despite this difficulty, the study is of relevance to this thesis, particularly since the offences under consideration were violent in nature. As with the Brewin (1984) research, the association between

attributions of control and help was examined. Again, some support for this part of the model of interest here (see Figure 3.8) is provided. Reid and Millard essentially tested the same model as Brewin (1984) (see Figure 3.9). However, the study differed in that the stability dimension was also considered. Also, help was indirectly measured in terms of ratings of treatability from which likelihood of help-giving was inferred.

In a healthcare setting, Bromley and Emerson (1995) investigated care staff's causal attributions about the challenging behaviours of people with learning disabilities and their associated emotional responses. The research took place within the context of a survey of all people with learning disabilities and challenging behaviour in a single metropolitan borough. Using structured interviews and questionnaires developed in previous studies (Qureshi & Aborz, 1992; Kiernan & Qurishi, 1993) they collected (amongst other things) information about the opinion of the member of care staff completing the questionnaire on the causes of the individual's challenging behaviour, the emotional reaction of care staff to the behaviour, and those aspects of the challenging behaviour which were judged to cause the most stress. In order to find out what the staff member considered to be the cause of the person's challenging behaviour, open ended questions were asked. Responses to these were grouped into 11 categories; internal psychological state or mood, past environment, current environment, self-stimulatory, communication or control, attention seeking, specific medical problems, learning disability or specific syndrome, mental illness, lack of communication skills, and escape or avoidance. Emotional reactions were elicited by asking what proportion of the full care staff group *usually* felt anger, annoyance, despair, disgust, fear and sadness in response to the challenging behaviour in question. This was estimated using a five point scale.

The authors report that care staff tend to perceive that factors which cause challenging behaviour are ones over which they themselves have little control. They also tended to report certain patterns of emotional responses

to specific behaviours. For example, annoyance and anger were the most commonly reported responses to violence.

The research conducted by Bromley and Emerson (1995) has the advantage of soliciting the attributions of care staff and is based on attributions from a large sample (N = 70) of individuals exhibiting challenging behaviours. There are a number of limitations of the study, however. The data were collected in a variety of ways, sometimes by interview, sometimes by questionnaire and using a range of different instructions depending on the circumstances. Therefore, comparability cannot be assured. In addition, an assumption was made about the care staff's perception of control based on the nature of the reported cause. For example, if a staff member stated that the cause of the challenging behaviour was the patient's general psychological state, this was assumed to suggest that the care staff felt that they had little control. Thus it could be argued that it was actually the researchers assumptions of control that were being measured rather than the care staff's attributions. This study looked at attributions and emotional responses but did not consider actual behaviour or reported intentions to act. In addition, staff were asked about their views concerning the emotional reactions of the staff group as a whole rather than their own emotions. Thus they were speculating about the affective reactions of others and the validity of this is obviously questionable.

Bromley and Emerson's (1995) study is of limited relevance here. Whilst the researchers did examine attributions of control and emotional responses, the relationship between these was not investigated. Also, behavioural responses were not investigated. However, the fact that the study considered staff attributions for self as well as for patient is of interest here. The authors do indicate that where staff perceived themselves to have little control over the causes of challenging behaviour this was likely to be associated with increased stress which can have implications for patient care.

In another study, Cottle et al. (1995) examined the causal attributions made by care staff (N = 20) who were mainly qualified nurses, about actual violent incidents in which they had been a victim. The study took place in a psychiatric hospital and involved care staff working with individuals with learning disabilities and/or mental health needs. The majority of these were detained under sections of the Mental Health Act (1983). The criteria for including care staff in the study were: 1) that a staff member had received a physical injury inflicted by a patient, 2) if two patients were involved in an altercation and had to be separated, or 3) if a staff member was threatened with physical injury by a patient. Staff were interviewed and required to complete questionnaires within one week of the incident, and again, one month later. Care staff (N = 20) were interviewed and completed questionnaires about 30 separate incidents involving 11 patients. The researchers used a modification of the Attributional Style Questionnaire (ASQ) (Peterson, Semmel, Baeyer, Abramson, Metalsky & Seligman, 1982; Peterson & Villanova, 1988) to measure care staff's attributions. In addition, staff feelings (emotions) were measured in terms of expressed emotion (EE) using the Five Minute Speech Sample (Magana, Goldstein, Karno, Milkowitz, Jenkins, & Falloon, 1986).

No significant differences were found between attributions made at first and second assessments. Care staff tended not to blame themselves for the incident and made attributions which were generally internal and personal to the patient, and external to themselves. They also tended to make uncontrollable attributions for themselves, and attributions to causes that were neither controllable nor uncontrollable for the patient. In terms of feelings, within a week of the incident, 56.6% of staff were rated high on the expressed emotion measure. This was mainly because of the high level of critical comments made. After one month, the percentage of staff rated as high expressed emotion had increased to 66.6%. It could be assumed that a high level of critical comments on this measure is indicative of high levels of anger. However, this could be argued to be an assumption by the researchers as staff were not actually asked about their emotional state. A

particular difficulty with the use of the expressed emotion scales here is that no measure of positive emotion was obtained. Individuals are rated as 'high' or 'low' expressed emotion on the basis of number of critical comments made, emotional over-involvement and hostility. From this it is not possible to evaluate the levels of sympathy experienced by the staff to the patients. Also, as Cottle et al. themselves point out, since no baseline data for expressed emotion were obtained, it is possible that the high expressed emotion pre-dated the incident and may actually have been influential in the development of the violent interchange.

Another potential issue concerning the data from the Cottle et al (1995) study is that the information was collected retrospectively. The first set of attributions made by staff after the incident were collected up to a week following the event. During this time the individual may have had the opportunity to review their understanding of the incident and their attributions about it may have altered. Also, Cottle et al. did not examine staff's emotional or behavioural responses to the violent incidents.

Like the Bromley and Emerson (1995) study, Cottle et al. (1995) examined attributions and emotions. However, again, they did not really address associations between these but rather relative frequencies of certain types of attributions and expressed emotion scores. Thus the relevance of this research to the model presented in Figure 3.8 is limited. However, Cottle et al. draw attention to a number of issues which may have implications for the development of the model. Firstly, the potential role of a staff member's attributions for self may need to be incorporated. Secondly, other attributional dimensions (such as locus) are of possible importance but are not included in the model. Whilst the Cottle et al. study does not indicate the mechanisms involved here, it nonetheless does suggest that these factors may be of relevance to the model. It is possible that perceived control for staff moderates the relationship between anger and retaliation, for example.

Sharrock et al. (1990) carried out an investigation in a medium secure unit for mentally disordered offenders which examined 34 nursing and paramedical staff's explanations of hypothetical behaviours attributed to an actual patient on the unit. The care staff studied were required to consider 14 'negative institutionally relevant behaviours' found commonly in patients with a mental illness, and to rate these with reference to the target patient using a modified version of the ASQ. The relationship between the explanations provided by care staff and reported optimism concerning the patient's treatability was measured using an adaptation of the optimism-pessimism scale (Garety & Morris, 1984). The study also examined staff's emotional responses to the behaviours by means of four 7-point bipolar scales relating to the emotions of anger, disgust, sympathy and pity. As there were high correlations for ratings of anger and disgust, and for sympathy and pity, the scores were added together to give two scores, one for anger and one for sympathy. In addition the researchers looked at the association between care staff's explanations and reported helping behaviour, using a rating scale in which care staff had to indicate the amount of extra effort they would exert in helping the patient. Thus the care staff had to imagine the patient exhibiting each example behaviour and then complete the questionnaire and rating scales accordingly.

It was found that care staff tended to make internal, controllable, stable and global attributions about the target patient. Furthermore, it was found that stable and controllable attributions were negatively and independently related to optimism about the target patient. In addition, care staff optimism was strongly positively related to reported helping behaviour. Of the emotion ratings, the only significant correlation found was that sympathy was negatively associated with controllability. No correlations were found between either emotion (anger or sympathy) and helping behaviour. These findings provide little support for Weiner's (1995) model (illustrated in Figure 3.8). The only relationship which is supported is the negative one between high perceived control for patient and sympathy. In order to explain their findings, Sharrock et al. (1990) argue that professional helping may be quite

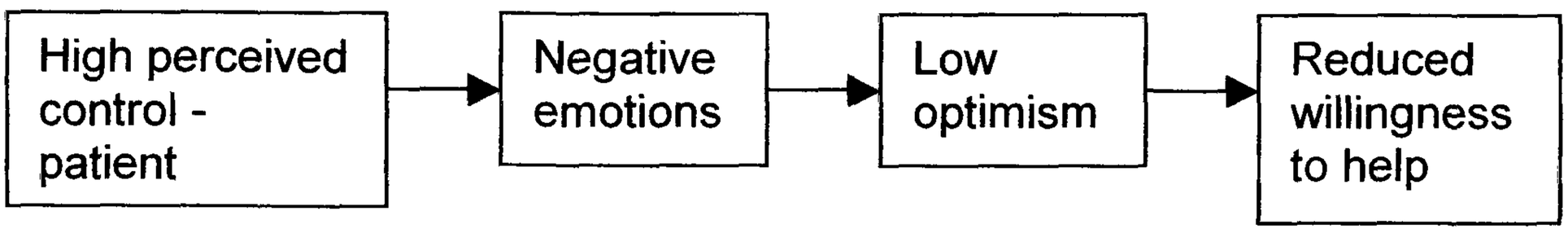
different from spontaneous helping, the former requiring planning and cognitive activity on the part of the helper. Furthermore, they suggest that as psychiatric nursing staff are frequently required to deal with negative behaviour of others, they may have learned not to be influenced significantly by their affective reactions to such behaviours. This may imply that behavioural responses of healthcare staff when faced with challenging patient behaviour are skills which are learned through training and experience.

One criticism of this study is that attributions for only one patient were studied. Whilst this has the advantage of enabling the researchers to consider the variation between care staff in terms of attributions made for the same patient, it is difficult to generalise these findings to other patients without further research. Indeed, it is unclear how typical the target patient in the research was, since little information concerning the individual is made explicit. All that is known is that the patient had been resident on the ward for 14 months, and was diagnosed as personality disordered with borderline intelligence. Thus factors such as gender, which may have a particular impact on care staff's explanations of the challenging behaviour (see for example Wilczynski, 1991), are not considered. In addition, the patient behaviours examined were not examples of behaviours that the patient had necessarily exhibited, making the benefits of using a real patient unclear.

Dagnan et al. (1998) carried out a similar study to that of Sharrock et al. (1990) with care staff (N = 40) working with people with learning disabilities. Again, using an adaptation of the ASQ, staff were asked to identify possible causes of challenging behaviours of patients, choose the most likely cause, and rate attributions, emotions, optimism and helping behaviour. They were also required to evaluate the behaviour and the individual on a scale ranging from 'completely neutral' to 'extremely bad'. The study used some of the example behaviours from the Sharrock et al. (1990) study but differed from that research in that it also used hypothetical patients rather than an actual known patient. The researchers found that when the patient was perceived

as more able to control the cause of a challenging behaviour, care staff were more likely to display negative emotion, lower level of optimism concerning treatability and a reduced willingness to offer help. These findings are illustrated in Figure 3.10. There was also a significant correlation between the attribution of controllability and the negative evaluation of the behaviour and the patient by care staff. Dagnan et al. (1998) suggest that when staff perceive the challenging behaviour to be controllable by the patient then they tend to blame the patient and evaluate that person and the behaviour in a negative way. This study provides stronger support for Weiner's (1995) model in that a positive relationship was found between high perceived control for patient and staff negative emotions.

Figure 3.10 Diagrammatic representation of Dagnan et al.'s (1998) findings

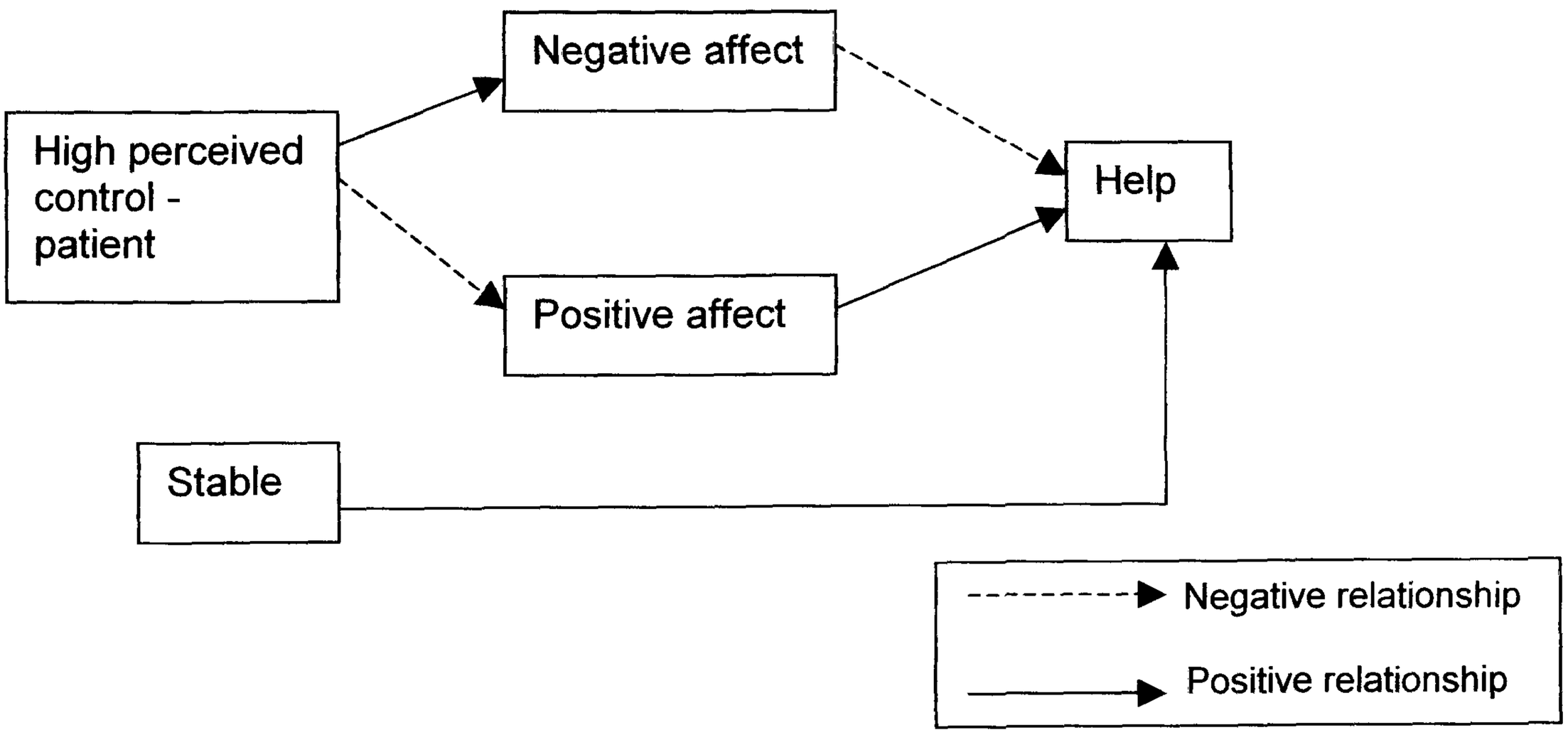


An advantage of the Dagnan et al. (1998) research is that it solicited the views of a large group of care staff. However, again hypothetical situations and people were used and no account of gender differences was provided. Another difficulty with the study is that the emotions of anger and sympathy were measured on one dimension (negative-positive emotion), thus they were not examined independently. This assumes that anger and sympathy as opposite ends of a continuum rather than separate constructs.

More recently, Stanley & Standen (2000) asked 50 care staff to rate six case studies representing actual incidents of challenging patient behaviour. These case studies included three categories of behaviour; aggressiveness, destructiveness and self-injury. Participants were required to rate each scenario on seven 9-point scales (control for patient, negative affect, positive

affect, locus, stability, optimism, and helping). The researchers found that the more outer-directed the patient behaviour (as opposed to inner-directed behaviours such as self-injury), the greater the carers' attributions of control for patient, negative affect and the less propensity to help. Combining data from all categories of behaviour (aggressiveness, destructiveness, and self-injury), Stanley and Standen found that perceiving the causes of challenging behaviour as controllable by the patient was associated with negative affect, and negatively associated with positive affect. Both positive affect and perceiving causes as stable were associated with reported intentions to help. These findings are illustrated in Figure 3.11.

Figure 3.11 Diagrammatic representation of Stanley & Standen's (2000) findings



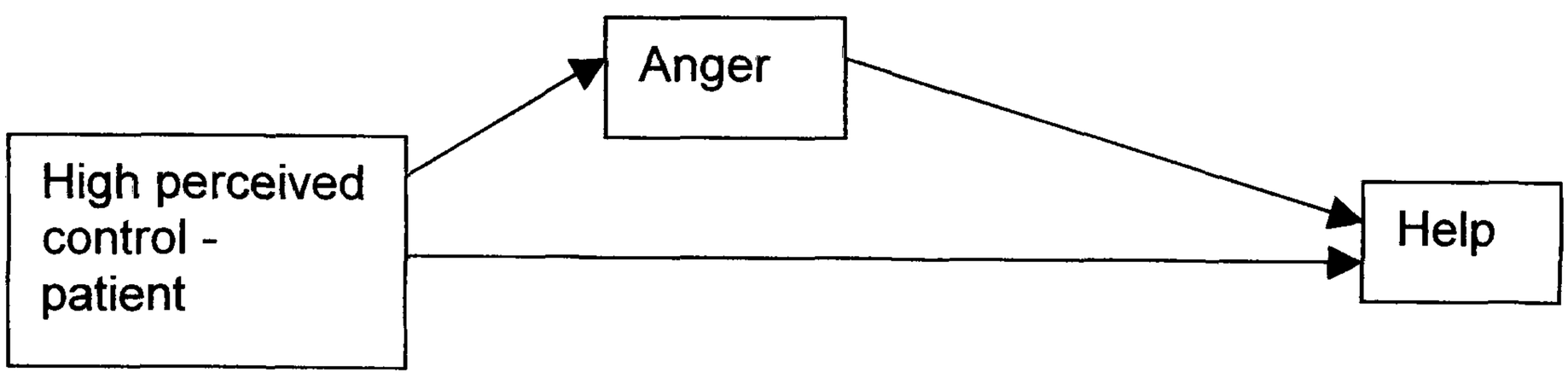
Once again, certain aspects of Weiner's (1995) model (see Figure 3.8) are supported; positive relationships were found between high perceived control for patient and negative affect, and between positive affect and help. In terms of negative relationships, these were found between high perceived control for patient and positive affect, and between negative affect and helping.

As with much previous research in this area, although the case studies were taken from actual incidents, the descriptions were anonymous and are thus subject to the same criticisms as hypothetical scenarios used in other research. Another potential limitation of the research is that questionnaires were used exclusively to measure attributions. Furthermore, the case studies avoided cues as to race, age and gender. Whilst this superficially appears to tackle the issue of bias according to these factors, when visualising the behaviours, staff would seem likely to assign these characteristics to the described individuals. Therefore these issues, which may have a significant influence on staffs' attributions, are essentially glossed over. As with the Dagnan et al. (1998) study, anger and sympathy were not measured independently. Again, in relation to the model of interest in this thesis, the areas examined are the associations between attributions and emotions, and emotions and behaviour.

Wanless and Jahoda (2002) point out that vignettes are unlikely to evoke the same range and depth of cognitive and emotional responses as real events. Furthermore, they highlight the fact that hypothetical scenarios involving fictitious patients fail to acknowledge the real relationships that healthcare staff develop with patients. Wanless and Jahoda attempted to examine this issue in more detail by comparing attributions made by healthcare staff in relation to hypothetical vignettes with actual violent incidents in which they had been involved. They presented 38 healthcare staff with hypothetical scenarios and also asked them to describe incidents involving actual patients. The staff rated their attributions, emotions, and helping behaviour in relation to these on 7-point rating scales. Wanless and Jahoda found that negative emotions were more commonly expressed when staff described actual events in which they had been involved than when they were responding to hypothetical vignettes. For both the vignettes and the actual incidents, attributions of control were associated with anger. However, contrary to prediction, high perceived control for patient was associated with reported intentions to help. Perhaps more surprisingly, anger was

associated with helping behaviour whereas sympathy was not (see Figure 3.12), which certainly does not support Weiner's (1995) model. This is a surprising finding and one which requires explanation.

Figure 3.12 Diagrammatic representation of Wanless and Jahoda's (2002) findings



Wanless and Jahoda (2002) point to possible methodological problems which could have influenced their findings. For example, they postulate that participants may have been vulnerable to socially desirable responding and in support of this they point to the fact that the pattern of responding of staff tended to suggest minimisation of negative reactions. It is perhaps understandable that healthcare staff would wish to present themselves as able to care for patients, even when those patients are presenting in a violent manner, particularly those staff who are expected to deal with violent patients on a day to day basis. Thus although the researchers tackled the problem of real versus imaginary events, the use of rating scales to measure attributions, emotions and helping could still have led to biased responding. Consistent with this, other research has found that asking staff about actual behaviour in real situations gives a better indication of job performance than asking questions unrelated to real past behaviour. That is, predictive ability is enhanced where descriptively anchored rating scales are used that are situation specific (Taylor & Small, 2002).

Jones and Hastings (2003) have also investigated the relationships between health care staff's attributions, emotions and behaviours, but in relation to

self-injurious behaviour of patients. They showed 123 staff working with adults with learning disabilities one of two videos developed by Mossman, Hastings and Brown (2002). Both involved actors playing the parts of a man with severe learning disabilities and his teacher. In one version self-injurious behaviour was depicted to be maintained by attention, and in the other by escape/avoidance of task demands. Following presentation of the video footage, staff were required to complete three questionnaires. One of these, the Emotional Reactions to Challenging Behaviour Scale (Mitchell & Hastings, 1998), measured affective responses. Responses on this generate two subscale scores; one for depression/anger, and the other for fear/anxiety. A further eight items were added to the scale which provided two positive emotion dimensions; cheerfulness/excitement and confidence/comfort. Attributions for the self-injurious behaviour seen on the video were measured using the Revised Causal Dimension Scale (CDS-II) (McAuley, Duncan & Russell, 1992). This was adapted so that the items referred to the third person rather than self-attributions. Helping behaviour was measured using scales developed by the researchers for the purposes of the study. Staff were presented with 14 possible strategies for managing the challenging behaviour; seven of which would positively reinforce the self-injury as depicted in one version of the video and seven for the alternative version. Three of the original items were removed as they had low intercorrelations with other items. Staff were asked how likely it would be that if presented with this situation they would use each technique, using a 7-point bipolar rating scale.

Jones and Hastings (2003) found that increased negative affect was not associated with controllability attributions. There was no association found between attributions and reported behavioural intentions. Furthermore, no support was found for the role of affect as a mediator between causal attributions and helping behaviour. Significant relationships were found between attributions and emotions, however. In the attention-maintained scenario, staff reported feeling more confident and relaxed when they attributed the self-injury to causes controllable by the patient. They were

also more likely to report feelings of depression and anger when they attributed causes to factors external to the patient. In the escape-maintained scenario, staff were more likely to report feelings of depression and anger when they perceived the causes a internal to patient. The authors point out that these findings may be specific to the challenging behaviour studied, namely self-injurious behaviour, and may not generalise to other patient behaviours such as violence. They suggest that self-injurious behaviour is very difficult to comprehend and being able to attribute its cause to the patient rather than self may have a self-protecting function for staff.

Markham and Trower (2003) used Weiner's (1985) model in their investigation of 48 mental health nurses' perceptions and causal attributions for individuals with and without a psychiatric label of 'borderline personality disorder'. Staff were asked to imagine a patient with a specific psychiatric diagnosis (borderline personality disorder, schizophrenia, depression). They were then presented with six short vignettes involving patients exhibiting challenging behaviours. These were based on those used by Dagnan et al. (1998). The behaviours depicted included violence, maliciously setting off a fire alarm, refusal to cooperate with staff, and refusing to attend an activity session. Using an adaptation of the ASQ, participants were required to identify one major cause of the behaviour and rate this cause according to the dimensions of internality, stability, globality, controllability of the cause, and controllability of the event. They also rated level of sympathy and optimism. Attributional dimensions, sympathy, and optimism were all rated on 7-point bipolar scales. Each participant carried out this exercise three times, so that they each considered all diagnostic options.

It was found that staff tended to view the negative behaviours of hypothetical patients with the label of borderline personality disorder as more stable. In addition, they viewed such individuals as more in control of causes of the event and the incident itself. Furthermore, staff reported less sympathy, less optimism, and more negative experiences of working with this group of patients. Higher control attributed to patients was negatively correlated with

sympathy. These findings provide some support for Weiner's (1995) model when considering patients in a particular diagnostic group, namely, borderline personality disorder. However, the authors did not examine the behavioural component of the model. Thus they examined the association between attributions and emotions only.

Interestingly, this research was concerned with stereotypical beliefs held by staff towards female patients. However, it is not clear whether staff were asked to imagine hypothetical patients of a particular gender. In fact, this aim is only introduced in the discussion section of the paper and no patient gender differences are mentioned in the study.

Research in this area has implications for Weiner's (1995) model as depicted in Figure 3.8. Despite the problems with the studies thus far, and although the support for the proposed model is somewhat mixed, the research does suggest that care staffs' attributions about various patient behaviours can have a significant impact on the way they view the patient as well as their feelings about them, and subsequent behaviour. A summary of the research detailed above can be found in Table 3.2.

Table 3.2 Summary of research investigating attributions and behaviour of healthcare staff dealing with challenging patient behaviour

Authors	Year	Attributional Measure	Real or hypothetical scenario	Sample	Focus of study	Findings
Brewin	1984	Social Readjustment Rating Questionnaire (SRRQ)	Hypothetical	Medical students	Attributions and helping (intentions to prescribe medication)	Students more willing to help (prescribe medication) for events perceived as uncontrollable
Sharrock, Day, Qazi & Brewin	1990	ASQ,	Hypothetical	Healthcare staff working in medium secure unit	Attributions, emotions, optimism, and intended helping behaviours in relation to hypothetical patient behaviours	Staff tended to make attributions internal, controllable, stable and global for patient. Sympathy was negatively correlated with controllability. No correlations between emotions and behaviours.
Bromley & Emerson	1995	Interview, self-designed questionnaire	Real	Staff working with people with learning disabilities	Attributions and emotions for challenging behaviours of people with learning disabilities	Causes perceived as uncontrollable for self. Certain emotional responses associated with particular patients behaviours e.g. anger with violence

Cottle, Kuipers, Murphy & Oakes	1995	ASQ	Real	Staff working with detained inpatients	Attributions and emotions of staff working with detained patients following actual incidents of violence	Staff made attributions which were internal and personal to patient, external to self.
Reid & Millard	1997	CDS	Real	Healthcare staff working in high security hospital	Attributions and treatability ratings for detained high security patients	Stable controllable attributions for patient associated with poorer treatability ratings
Dagnan, Trower & Smith	1998	ASQ	Hypothetical	Care staff working with people with learning disabilities	Attributions, emotions, optimism regarding treatability and reported behavioural intentions to help patients exhibiting challenging behaviours	High perceived control for patient associated with negative emotion, lower treatability ratings, reduced willingness to help
Stanley & Standen	2000	Self-designed questionnaire	Hypothetical case studies (based on actual incidents)	Care staff working with people with learning disabilities	Attributions, emotions and reported behavioural intentions to help patients exhibiting challenging behaviours	High perceived control for patient associated with negative affect, which in turn was negatively correlated with helping behaviour.

Wanless & Jahoda	2002	ASQ	Both	Care staff working with people with learning disabilities	Attributions, emotions, optimism regarding treatability and reported behavioural intentions to help patients showing challenging behaviours	High perceived control for patient associated with anger and helping. Anger was associated with helping, sympathy was not.
Jones & Hastings	2003	CDS-II	Hypothetical	Care staff working with people with learning disabilities	Attributions, emotions, reported intentions to help patients exhibiting self-injurious behaviour	Attention-maintained self-injury: control for patient associated with confident/relaxed affect; external to patient associated with depression/anger. Escape-maintained self-injury: internal to patient associated with depression/anger.
Markham & Trower	2003	ASQ	Hypothetical	Mental health nurses working within adult or older adult inpatient NHS facilities	Attributions, emotions, optimism	Causes of behaviour of patients with borderline personality disorder rated more stable, controllable by patient. Staff less sympathetic, less optimistic, and more negative about these patients compared with those with diagnosis of schizophrenia or depression.

3.3.6 Limitations of previous research

There are a number of limitations of the research thus far which merit further investigation. Methodologically, studies have relied almost exclusively on hypothetical clients and/or scenarios (e.g. Dagnan et al., 1998), and questionnaire/rating scale methods to measure attributions, emotions, and behaviours (e.g. Sharrock et al., 1990). These do not take into account the rich context surrounding actual incidents with real people. The extent to which staff attributions, emotional and behavioural responses reported in such studies reflect how they would actually think, feel, and act when dealing with challenging client behaviour is simply not known. Theoretically, studies have tended to make the assumption that anger and sympathy are opposite ends of the same continuum. This could be certainly be questioned. During a violent incident a nurse may experience a range of emotions and their feelings may change during the course of an event.

In terms of focus, previous studies have not considered behavioural responses other than helping. Despite the fact that Weiner (1995) states that help and violence are opposite sides of the same coin, his research tends to focus on one or other of these behaviours rather than addressing them together. He did not, for example, consider the potential of individuals to react in a violent manner when confronted with a drunk on the subway (Weiner, 1980a). Certainly it would seem possible that angry feelings towards the drunk could be expressed in, say, verbal abuse, rather than just passive non-help giving (neglect). Those studies which attempt to apply Weiner's model in clinical settings also only consider intentions to help or not to help, thus ignoring the potential response of retaliation. It is arguably appropriate to consider all of these potential responses when applying Weiner's model to healthcare staff working with violent patients. Certainly history has shown that healthcare staff may respond with help or retaliation towards violent patients who they are tasked with treating (see Shepherd, 1996).

Another issue which has received very little attention in the literature in this area is gender. The influence of patient and/or staff gender on attributions, emotions, and behaviours is unclear. Few studies in this area address the issue of gender at all (e.g. Dagnan et al., 1998; Sharrock et al., 1990; Stanley & Standen, 2000), this is despite the fact that previous research has shown that the violence of men and women can be viewed and dealt with quite differently by various groups of professionals. Horn and Hollin (1997) for example, found that both police and non-police participants perceived female offenders as being less deviant or 'fundamentally bad' than male offenders. Harsh punishment was generally viewed as inappropriate for women, who were considered to be more likely to benefit from rehabilitation than men. Given such findings regarding male and female offenders, it seems likely that patient gender may also influence care staff attributions, such that male patients may be perceived as having more control over violent episodes than women. Certain other research findings support this suggestion. For example: clinicians assess dangerousness differently in male and female patients (Coontz, Lidz & Mulvey, 1994), clinicians are poorer at predicting the risk of violence for female patients (Lidz, Mulvey & Gardner, 1993), offending of women is often trivialised or explained in terms of situational factors (e.g. Carlen, 1988) or personal pathology (e.g. Allen, 1987), and women who kill their children are far less likely to be sent to prison than men (Wilczynski, 1991).

What literature there is suggests that the violent behaviour of women tends to be attributed to external or internal-uncontrollable causes in comparison with that of men (Allen, 1987; Carlen, 1988). It is possible that patient gender issues account, at least in part, for the different findings from the various studies which examine the attributions, emotions, and behaviours of healthcare staff working with violent patients. The Sharrock et al. (1990) study for example, involved just one patient whose gender is not specified. In the Wanless and Jahoda (2002) study, although a total of 38 staff described real violent incidents in which they were involved in with patients, this was limited to events including just six patients; four of whom were male

and two female. Unfortunately, the data for male and female patients were not considered separately. In any case, the inclusion of so few patients would make any possible gender differences difficult to identify and generalise.

Murphy and Brown (2001) found that staff identified by the Bem Sex Role Inventory (BSRI; Bem, 1974) as feminine sex role types, reported 'harsher attitudes' (more deviant and less capable of positive change) towards female offenders than staff identified as masculine, undifferentiated, or androgynous. This could suggest a staff-patient gender interaction effect.

Given these findings, it might be expected that healthcare staff will view the violent behaviour of female patients differently to that of male patients, and will also behave in a different manner when confronted with such behaviour. This would appear to be an area worthy of further consideration.

3.4 Conclusions

Much of the literature which focuses on the causes of violence can be difficult to apply in work settings where staff at high risk of encountering violent situations. This is because it tends to view violent interchanges as uni-directional and linear. This means that the roles of 'perpetrator' and 'victim' are perceived as clear and distinct, and that there is a lack of consideration of the possible interaction effects of different causal elements. Attribution theory, and in particular, Weiner's (1995) attribution-emotion-action model of help versus violence, provides a framework within which these aspects of violent situations can potentially be acknowledged and understood. Recent studies which apply Weiner's model to healthcare situations in which staff deal with difficult client behaviours have found mixed support for it. However, a number of limitations of research in this area may help to account for the different results found.

This thesis aims to advance the literature in this area by: first, examining real rather than hypothetical events; second, applying different measures of attributions, emotions, and behaviours, to those which have been traditionally used; third, including larger numbers of participants and situations; fourth, considering gender issues; fifth, investigating the behavioural response of retaliation in addition to helping, and sixth, evaluating the extent to which findings can be generalised across professional groups. However, a range of methodological issues will be considered first.

CHAPTER FOUR

Methodology: Measuring Causal Attributions

There is a great deal of unmapped country within us which would have to be taken into account in an explanation of our gusts and storms.

George Eliot (Mary Ann Evans)
Daniel Deronda, 1876

4.1 Introduction

The aim of this chapter is to review various methodologies that have been used to measure attributions, and to explore the different assumptions behind these. Questionnaire methods, will be examined first, followed by a consideration of other means of assessing attributions, namely the measurement of 'spontaneous' or 'spoken' attributions. Both of these methods involve self-report, where the individual is asked to provide information directly. In the case of questionnaires, this is in the form of written responses to questions in a free response format and/or by means of rating scales in response to actual or hypothetical situations. In the case of spontaneous attributions, the information may be verbal in which case it is likely that it will be audio-taped and transcribed for analysis purposes. Alternatively, spontaneous attributions in documentation may be used for analysis. Each of the different methods have their advantages and disadvantages.

4.2 Questionnaire Approaches to the Measurement of Attributions

Rating scales have been used in attribution research largely because they have the methodological advantage of interval properties which allows the use of parametric statistical tests (Hewstone, 1989). Criticisms of this approach focus on the neglect of the usual way in which people make explanations on a daily basis i.e. ecological validity (e.g. Kelley and Michela, 1980).

Several questionnaires have been developed to measure attributions. The most commonly used questionnaire measure used in studies of healthcare staff involved in managing violent patient behaviour is the Attributional Style Questionnaire (ASQ) (Seligman, Abramson, Semmel & von Baeyer, 1979), but the Causal Dimension Scale (CDS: Russell, 1982), and the Challenging Behaviour Attributions Scale (CHABA:

Hastings, Remington & Hopper, 1995; Hasting, Reed & Watts, 1997; Hastings, 1997) have also been used. Attributions questionnaires have also been developed for use with other populations such as Gudjonsson's Blame Attribution Inventory (GBAI) (Gudjonsson, 1984; Gudjonsson & Singh, 1989) and the Blame Attribution Scale (ABS) (Loza & Clements, 1991) which have been used with offenders, and the Parent Attribution Test (PAT) (Bugental & Shennum, 1984; Bugental et al., 1989) which assesses perceived causes of caregiving success and failure. Those questionnaires most relevant to the measurement of healthcare staff attributions will be considered in more detail here.

4.2.1 Attributional Style Questionnaire (ASQ)

Martin Seligman and his colleagues at the University of Pennsylvania developed this questionnaire which is now used widely in research to measure causal attributions. The ASQ was devised within the context of the reformulated learned helplessness theory (Abramson, Seligman & Teasdale, 1978). The authors argue that three attributional dimensions: internal - external, stable – unstable, and global – specific are essential for understanding depression. The ASQ comprises twelve hypothetical events (six positive and six negative) which respondents are required to vividly imagine themselves experiencing and then to rate along the three causal dimensions. Figure 4.1 gives an example item.

Figure 4.1 Example ASQ Item (Seligman et al., 1979)

YOU HAVE BEEN LOOKING FOR A JOB UNSUCCESSFULLY FOR SOME TIME:

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1. Write down one major cause

2. Is the cause due to something about you or something about other people or circumstances? (Circle one number).

1 2 3 4 5 6

Totally due to other people or circumstances — Totally due to me

3. In the future, will this cause again be present? (Circle one number)

1 2 3 4 5 6

Will never again be present — Will always be present

4. Is the cause something that just influences this cause, or does it also influence other areas of your life? (Circle one number)

1 2 3 4 5 6

Influences just this particular situation — Influences all situations in my life

---

Studies examining the reliability and validity of the ASQ have found modest internal consistency for the sub-scales ranging from .44 to .73 (e.g. Sweeney, Anderson & Bailey, 1986). Test-retest reliability has also been assessed with reliability ranging from .47 to .67 (e.g. Golin, Sweeney & Schaeffer, 1981). Construct Validity has been addressed also, with Schulman, Castellon & Seligman (1989) quoting scores from .48 to .71. In terms of criterion validity, ASQ scores have been found to predict achievement in a number of domains such as employee productivity (Schulman, Keith & Seligman, 1991). Despite the modest reliability and validity, the ASQ remains an extremely popular means of measuring attributional style over a wide range of different settings and situations: educational achievement (Schulman, Seligman, Kamen, Butler, Oran, et al., 1990), work achievement (e.g. Seligman & Schulman, 1986), clinical problems (e.g. Miller, Klee & Norman, 1982), and clinical decision making (e.g. Sharrock, et al., 1990).

4.2.2 Causal Dimension Scale (CDS)

This scale was developed by Russell (1982) following a critique of researchers using questionnaire methodology for making the 'fundamental attribution researcher error'. What he meant by this was that a researcher often assumes that he or she knows how a respondent perceives an event in terms of it's causal structure and does not view the respondent as an active agent in the attribution process. The CDS allows the respondent to make an open ended attribution and then classify that cause in terms of the dimensions of controllable-uncontrollable, internal-external and stable-unstable. Following the open ended attribution made by the respondent, they are asked the following *'Think about the reasons you have written above. The items below concern your impressions or opinions of this cause or causes of your performance. Circle one number for each of the following questions'.* The 12 scales are: reflects an aspect of yourself-reflects an aspect of the situation, manageable by you-not manageable by you, permanent-temporary, you can regulate-you cannot

regulate, over which others have control-over with others have no control, inside of you-outside of you, stable over time-variable over time, under the power of other people, not under the power of other people, something about you-something about others, over which you have power-over which you have no power, unchangeable-changeable, other people can regulate-other people cannot regulate.

The scale is designed to assess perceptions of the cause of specific events rather than measuring general attributional style. In the original version of the test these were rated on nine semantic differential scales with three of the subscales representing each dimension. More recently, the CDS has been revised (CDS II) and the dimension of controllability has been subdivided into internal-controllable and external-controllable dimensions so that there are now 12 scales (McAuley, et al., 1992). Internal consistency of the four scales ranges from .60 to .92 (McAuley et al., 1992).

4.2.3 The Challenging Behaviour Attributions Scale (CHABA)

This questionnaire was developed by Hastings and his colleagues (Hastings et al., 1995; Hasting et al., 1997; Hastings, 1997) who perceived there to be a lack of adequate methods for measuring staff attributions for challenging patient behaviour, and potential changes as a result of training. A brief description of a challenging behaviour; either involving violence or stereotyped behaviour (see Figure 4.2 for these vignettes) is provided to participants who are then required to rate each of 33 causal statements applying to the behaviour on a five-point scale. These relate to five causal models: learned behaviour, medical/biological, emotional, aspects of the physical environment, and self-stimulation. Table 4.1 shows the 33 causal statements and their relevant sub-scales.

The questionnaire is not intended to measure staff attributional style, but rather their application of causal models of challenging behaviour in specific circumstances which are described in vignettes.

Internal consistency has been assessed with moderate to good levels of reliability reported for all of the CHABA sub-scales (.65 to .87). However, issues such as test-retest reliability and validity have not been addressed.

Figure 4.2 Example vignettes from the CHABA

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1. Sophie is a young woman who has severe learning disabilities (mental handicap). Sometimes, Sophie is aggressive toward the people who care for her and live with her. She will kick and punch people, pull their hair, and physically push them (sometimes so forcefully that people fall to the ground).

2. Sophie is a young woman who has severe learning disabilities (mental handicap). Sometimes, Sophie engages in stereotyped behaviours. She will rock from one foot to the other whilst standing in one place, wave her hands in front of her face or repeatedly roll things between her fingers.

Table 4.1 The CHABA causal statements and sub-scales*

Item and number	Sub-scale
1. Because she/he is given things that are too difficult for him/her	L/LN
2. Because she/he is physically ill	BM
3. Because she/he does not like bright lights	PE
4. Because she/he is tired	BM
5. Because she/he cannot cope with high levels of stress	EM
6. Because her/his house is too crowded with people	PE
7. Because she/he is bored	ST
8. Because of the medication that she/he is given	BM
9. Because she/he is unhappy	EM
10. Because she/he has not got something that she/he wanted	L/LP
11. Because she/he lives in unpleasant surroundings	PE
12. Because she/he enjoys it	ST
13. Because she/he is in a bad mood	EM
14. Because high humidity makes her/him uncomfortable	PE
15. Because she/he is worried about something	EM
16. Because of some biological process in her/his body	BM
17. Because her/his surroundings are too warm/cold	PE
18. Because she/he wants something	L/LP
19. Because she/he is angry	EM
20. Because there is nothing else for her/him to do	ST
21. Because she/he lives in a noisy place	PE
22. Because she/he feels let down by somebody	EM
23. Because she/he is physically disabled	BM
24. Because there is not very much space in her/his house to move	PE
25. Because she/he gets left on her/his own	ST
26. Because she/he is hungry or thirsty	BM

27. Because she/he is frightened	EM
28. Because somebody she/he dislikes is nearby	L/LN
29. Because people do not talk to her/him very much	ST
30. Because she/he wants to avoid uninteresting tasks	L/LN
31. Because she/he does not go outdoors very much	PE
32. Because she/he is rarely given activities to do	ST
33. Because she/he wants attention from other people	L/LP

***(L) learned behaviour; (LP) learned positive; (LN) learned negative; (BM) biomedical; (EM) emotional; (PE) physical environment; (ST) stimulation.**

4.3 Critique of questionnaire measures

The majority of attributional research reported in the literature has used questionnaires to measure attributions, with vignettes and rating scales being by far the most common means used to assess causal beliefs. However, a number of criticisms have been levelled at these methodologies and these are outlined below.

Whilst questionnaire methodology has the clear advantage of producing easily quantifiable and standardised material (Hewstone, 1989), the ecological validity of these measures has been called into question (Kelley & Michela, 1980). Thus the causal beliefs identified using questionnaires may be considered overly simplistic, perhaps providing more of a reflection of the experimenters' view of the world than the respondents'. Thus the respondent is required to rate their causal beliefs in terms of a limited and pre-specified selection of dimensions which they have no freedom to negotiate (Antaki, 1994). They are not able to generate their own dimensions but are forced to rate according to those dimensions deemed most important by the researcher. In fact, an individual may construe the causes of the situations in other ways which the researcher has not considered. Also, events are presented as isolated incidents without the rich contextual background in which real events take place which may influence the way in which an individual construes meaning (Silvester, 1998).

A particular problem with the situations contained within questionnaires is that they have different levels of applicability depending upon the population being studied. Items in the ASQ, for example, include becoming very rich, applying successfully for a job, getting a pay rise. This has led to some difficulties when attempting to use the questionnaire with certain clinical populations who may not have experience of these situations (e.g. Stratton & Swaffer, 1988), although this is not a universally reported problem (e.g. Gold, 1986). The vignettes used in

questionnaires may be targeted at specific groups which makes such measures of limited use with other populations. The hypothetical scenarios in the CHABA for example, are specifically aimed at staff working with people with learning disabilities. Questionnaire measures often have a limited range of situations, which could restrict the extent to which the results can be generalised. The ASQ, for example, covers only 12 situations (six positive and six negative) and this limits the number of attributions which can be sampled from each respondent as well as the extent to which the results can be generalised to other situations and events.

Some questionnaire measures have problems in terms of their clarity. The ASQ, for example, was developed using university students as respondents. Other less well educated individuals may well misunderstand the instructions and rate the outcome (rather than the *cause* they generated) on the three dimensions provided. This would make the results of the questionnaire invalid.

Certain questionnaires such as the ASQ (but not CHABA and CDS) tend to assume that attributional style is a persistent and stable personality characteristic. Thus an individual is assumed to attribute cause in a particular and fairly consistent manner across situations (Peterson et al., 1982; Seligman et al., 1979). However, others have questioned the concept of a stable 'attributional style' and consequently the value of the ASQ as a measure, because of the apparent lack of evidence for consistency of individual attributional patterns across situations (Cutrona, Russell & Jones, 1985). Support for this viewpoint has come a number of areas, one being test-retest reliability studies for the ASQ. Peterson et al. (1982) for example, found adequate test-retest reliability for the ASQ over a five week period, and interpreted this as evidence that an individual's general attributional style is relatively stable over time. However, the ASQ does not look at variability of attributions across contexts, but rather gives an overall measure which is calculated from

scores across a number of different situations. Some studies have reported only weak evidence of a consistent attributional style across situations (e.g. Cutrona et al., 1985). Cutrona et al. also concluded that questionnaire scores are poor predictors of causal attributions for *actual* negative events.

A problem with questionnaires generally is that they can be intrusive and threatening, particularly when considering sensitive populations such as clinical groups. Therefore, the development of more naturalistic measures of attributions made in conversation would seem to be important. Certain researchers have criticised methodologies which rely on explicit requests for attributions from respondents for events generated by the researcher (e.g. Hewstone, 1989; Harvey, Turnquist & Agostinelli, 1988), arguing that it is important to consider spontaneous attributions made in everyday dialogue. Acknowledging that attributions are made in the context of a social interaction and using appropriate methods to identify and encode such interactions may enrich our understanding of real life causal attributions.

4.4 Measuring Spoken Attributions

In view of the limitations of questionnaire methods, certain researchers have begun to develop measures which can assess 'spontaneous' causal beliefs. These techniques acknowledge that individuals need to share their understanding of the world with others in order to interact successfully and to negotiate a shared reality (Munton, Silvester, Stratton & Hanks, 1999). Whilst such methodology is not without its challenges, it offers the potential to enrich our understanding of causal attributions in a range of clinical and non-clinical areas.

There are a number of ways in which 'spontaneous' causal thinking can be investigated, for example: coding of written material, asking experimental subjects to think aloud, inferring causal search from

cognitive processes concerning unexpected selected events (Pyszczynski & Greenberg, 1981), and asking subjects to write down their thoughts while watching actors behave in unusual or negative ways (Harvey, Yarkin, Lightner & Town, 1980). Weiner (1985) reviewed such research and suggested not only that 'spontaneous', or 'spoken' attributions are important in everyday life, but also that they are more likely to be triggered by certain situations than others i.e. those that are novel, unexpected and/or unpleasant.

It has been claimed that 'free response' methodology is a particularly useful means of identifying attributions, when the group under study is resistant or sensitive (Harvey et al., 1988). In addition, providing individuals with the opportunity to give an account may help them to assimilate a traumatic experience and make sense of negative events. Thus account-giving has the potential dual advantage of providing rich attributional data and being a sensitive means of extracting that data.

4.4.1 Content Analysis of Verbatim Explanations (CAVE)

Seligman and his colleagues acknowledged the existence of resistant or sensitive populations for whom questionnaire methods of measuring attributions were not appropriate; those who 'cannot or will not take questionnaires' (Schulman et al., 1989). In the 'cannot' group were people who either are no longer alive or who the researcher would not ordinarily have access to, but whose attributions may be of interest (e.g. Vincent Van Gogh and Osama Bin Laden). In order to remedy the problem of access to these groups for the purposes of attributional research, the CAVE was developed (Peterson, Seligman & Vaillant, 1988).

The CAVE has two steps. Firstly, a researcher extracts a verbatim event and a causal explanation for that from written material; this can be any verbatim material. Secondly, blind judges rate the explanation on a 7-

point scale, along the dimensions of internal-external, stable-unstable and global-specific. In terms of step one, an 'event' is defined as any past, present, or hypothetical future stimulus, perceived as unambiguously positive or negative, that occurs in an individual's environment or within the individual (e.g. thoughts and feelings). Where the positive or negative perception is unclear, or where both positive and negative elements are present, the CAVE does not allow that event to be extracted. An explanation for the event must be expressed for rating to take place. In addition, a clear causal relationship must exist between the event and the explanation. Extractions which fulfil these criteria are then coded along the three attributional dimensions. The extractions are randomised within and between subjects and presented to three raters who are naïve to their source. Ratings are on a scale of 1-7, with 7 representing the most internal, stable, and global explanations. Where there is insufficient information for a rating to be made, a 4 is assigned.

The technique has been used in a variety of areas including studies of physical health (Peterson et al., 1988), and depression (Peterson, Luborsky & Seligman, 1983). Inter-rater reliability for ratings of negative outcome events were .73 for global-specific, .63 for stable-unstable, and .93 for internal-external (Schulman et al., 1989). Construct validity of the CAVE has also been evaluated. Peterson, Bettes, and Seligman (1985) for example, found that depressed college students' CAVE ratings for the internal-external and global-specific dimensions, significantly correlated with scores on the corresponding scales of the ASQ ($r=.41$, $p<.001$ and $r=.23$, $p<.01$).

Although the CAVE allows analysis of spontaneously produced attributions, and has acceptable reliability, one problem with it is that the number of attributional dimensions rated is limited to just three. The dimension of controllable-uncontrollable is not included which is problematic given the apparent particular importance of this dimension in influencing emotion and behaviour (Weiner, 1980a). In addition, the

method only allows attributions for outcomes involving self and thus it does not have the potential to explore attributions concerning the behaviour of others.

4.4.2 Leeds Attributional Coding System (LACS)

The LACS, which was developed by the Leeds Family Therapy and Research Centre (Stratton, Munton, Hanks, Heard and Davidson, 1988), represents a major development in the coding and analysis of causal attributions in natural discourse and in clinical settings. The researchers were interested in how attribution theory might enhance our understanding of family beliefs about the causes of their difficulties. Based on the reformulated learned helplessness theory (Abramson et al., 1978), the LACS was designed to analyse spontaneous or spoken attributions in natural discourse and was developed with psychology clinicians and researchers in mind.

There are six stages of attributional coding as defined by the LACS; identifying sources of attributions, extracting attributions, separating cause and outcome elements of each attribution, coding speaker, agent and target, coding attributions on causal dimensions, and analysis. The LACS allows for dimensions of cause to be rated for the speaker of the attribution, as well as for the agent (the person nominated in the cause) and the target (the person nominated by the speaker in the outcome or event) of the attribution. Speaker, target, and agent could potentially all be the same person. The roles and their descriptions can be found summarised in Table 4.3.

Table 4.3 LACS roles and descriptions

Roles in the Attribution	Brief Description
1. Speaker	The person making the causal attribution
2. Agent	The person nominated by the speaker in the cause
3. Target	The person nominated in the outcome

Inter-rater reliability for the various dimensions has been assessed (see Stratton et al., 1986). This study involved five raters independently coding data from five family therapy sessions, each with a different family at a different stage of treatment. A total of 217 causal statements were coded by the five raters and level of agreement was evaluated using Cohen's Kappa. Kappa scores for the various dimensions are: Stable .44, Global .07, Internal .59, Personal .30, and Control .47. Thus, the global-specific dimension had very poor inter-rater reliability, and the personal-universal dimension was also low. The agreement for the other dimensions was considered acceptable. More recent studies have achieved better reliability than earlier studies. Silvester (1997), for example, reports the following kappa scores: Stable .45, Global .36, Internal .73, Personal .42, and Control .72.

The most frequently used attributional dimensions of global-specific, stable-unstable, internal-external and controllable-uncontrollable were developed by Heider (1944, 1958) and Weiner (1986), in their extensive work on the underlying characteristics of causal beliefs. These same dimensions are used in the LACS, in addition to a new dimension, personal-universal which measures the extent to which a person believes

that any aspect of an attribution (cause, link or outcome) is unique to the person being rated (i.e. personal) or is shared by most other people in their reference group (i.e.universal). The dimensions and brief definitions of these can be found in Table 4.4.[6]

Table 4.4 The LACS dimensions and descriptions

LACS Dimension	Brief Description
1. Stable – Unstable	This dimension refers to the enduring nature of the cause and whether such a cause is likely to operate for future outcomes of similar nature *e.g. I failed the exam because I am stupid* would be rated Stable, whereas *I failed the exam because I had a cold* would be rated as Unstable as the same cause is unlikely to operate in the future
2. Global - Specific	This refers to the importance of the cause and its impact, in terms of outcome *e.g. I can't get a job because of my looks* would be coded as Global as the outcome (unemployment) is a broad one, whereas *Billy can't tie his shoelaces because he has still got his coat on* would be coded as Specific, referring to a limited range of outcomes
3. Internal - External	If the cause originates within the person being rated (*e.g. because of his personality)* it is coded as Internal. If the cause is situational (*e.g. due to the rain)* then it is coded as External
4. Personal – Universal	If the cause is seen to indicate something unique to the person being rated (*e.g. because of the way she talks)* then it is a Personal cause. If the cause would apply to most people, it is rated as Universal (*e.g. because he's only five)*
5. Controllable – Uncontrollable	A cause is coded as Controllable when the person being rated is seen by the Speaker to have control over the outcome *(e.g. he refused to answer)*. A cause which is Uncontrollable is one where the person being rated could not normally influence the outcome *(e.g. he was feeling so poorly that we didn't go out).*

[6] Further details concerning definitions used in this research can be found in chapters 5, 6 & 7.

4.5 Critique of measures of spoken attributions.

The methodology is not without it's difficulties and Harvey et al. (1988) point to a range of potential challenges in using such approaches. The analysis of verbatim information generally requires the use of transcripts. This can mean that actually producing the data to be coded can be both time consuming and expensive. This can be prohibitive where there are time constraints and/or limited resources. The coding of the data is complex and therefore training of coders is recommended in order to ensure that adequate reliability is achieved. This can be a laborious and time consuming process which also has cost implications. Although the LACS has no specified training programme and has a comprehensive manual explaining the process, it is recommended that training take place with an appropriately experienced individual. Training in the CAVE technique consists of an 8-hour workshop, divided into 2-hour meetings over four days and led by an experienced CAVE trainer. Between workshop meetings participants are required to complete a number of assignments which involve extracting and rating data. There are few trainers in the UK and therefore the use of the CAVE in this country is limited. In view of the training implications, the method should not be considered to be one which can be learnt and applied in a short time frame (Silvester, 1998).

The data obtained from measures of spoken attributions are less amenable to quantitative analysis than questionnaire data. The data fall somewhere between the qualitative and quantitative disciplines (Silvester, 1998). Although such a position has it's advantages, such as that both qualitative and quantitative researchers can use the method, it is important that there is clarity about how the attributions are being interpreted.

Viewing spoken attributions as a direct reflection of internal cognitions can be problematic. It certainly cannot be ruled out that distortions will occur for a variety of reasons (Marshall, 1994). For example, self-presentation issues may influence the explanations people give. This is likely to vary depending upon the nature of the data, the context in which it was gathered, and the population being studied. Where interviews are used to elicit attributions, it is important to be careful about the format of the questions in order to limit distortions. Hollway and Jefferson (2000) criticise questionnaire approaches to potentially complex psycho-social events, but also argue that data obtained from interviews can be equally limited when closed and 'why?' questions are used.

Another potential limitation of this method is that there may be sample bias in that there may be a certain amount of self-selection of individuals prepared to be interviewed or provide written accounts to researchers. This is likely to be particularly apparent when the subject under investigation is of a sensitive nature where the individual providing the information may feel concerned about how the information they provide will be used and interpreted.

Despite certain criticisms, the study of spoken attributions provides a rich data source and one which can enhance our understanding of causal reasoning (Munton et al., 1999). The coding framework provided by the LACS represents an important methodological advance in the study of causal attributions, as they occur in conversation. The LACS has been used in research in a range of different areas including family therapy (e.g. Munton & Antaki, 1988), comparing groups of mothers (e.g. Silvester & Stratton, 1991), with families of schizophrenic patients (e.g. Brewin, 1994), studies investigating post-traumatic stress disorder in disaster victims (e.g. Joseph, Brewin, Yule & Williams, 1993), risk assessment (e.g. Robertson & Clegg, 2002), candidate success in recruitment interviews (e.g. Silvester, 1997), and work performance (e.g. Silvester, Patterson & Ferguson, 2003).

4.6 Conclusions

Studying attributions both through the use of questionnaires and analysis of written or spoken information are both useful methods which have the common advantages of: 1) providing the respondent's own views directly, 2) giving access to phenomenological data (i.e. their perceptions of themselves and their world), which are difficult to obtain in other ways, and 3) gaining information in situations where observational data is not available (Barker, Pistrang, Elliott, 2002). Some researchers have even suggested that the views of participants should *always* be examined, unless there are exceptional circumstances which contraindicate this (e.g. Kelly, 1955). In fact Kelly (quoted in Fransella, 1981: p166) states:

> *'If you do not know what is wrong with a person, ask him. He may tell you'.*

All of the published research which examines staff attributions for violent client behaviour has used questionnaires to measure attributions. However, studies in other related areas, such as parental attributions concerning violent child behaviour, has demonstrated that attributions are amenable to study by social methods such as interview. As conversation is a rich source of attributions, this is arguably an important and potentially fruitful means of examining staffs' explanations of violent patient behaviour where the use of questionnaires may well lead to more biased responding (Wanless & Jahoda, 2002). Another potential advantage of coding naturally occurring attributions is that data which has already been produced, in the form of documentation or interview transcripts and so on, can be analysed. Thus in situations where it is not possible to get the participants to complete questionnaire data, information can still be used for research purposes.

New developments in the measurement of causal attributions, provide optimism for empirical progress in the research into violence in the workplace. The LACS provides an opportunity to advance the research into the causes and appropriate management of violent occurrences in high risk work settings. However, the methodology has not been used previously to investigate staff's attributions concerning violent incidents. This issue is addressed in the next chapter which describes a small pilot study. This aimed to establish whether or not healthcare staff produce attributions in accounts about violent incidents and if the LACS is an appropriate tool for their extraction and coding.

CHAPTER FIVE

Pilot study: An exploration of the use of the LACS for extracting and coding attributions from staff accounts of violent incidents involving patients

5.1 Introduction

The LACS was developed for clinicians and researchers as a means of analysing spontaneous attributions in natural discourse (Stratton et al., 1988). It has been used to evaluate attributions made in a wide range of situations and settings, including family therapy sessions (Munton & Antaki, 1988), interviews with families of patients with mental health problems (Brewin, 1994), recruitment interviews (Silvester, 1997), and risk assessment decision making (Robertson & Clegg, 2002). Research findings from these areas has indicated that the LACS can be a useful tool in the measurement of spoken attributions, which can help to enhance our understanding of causal reasoning (Munton et al., 1999). The LACS has not, however, been used previously to analyse attributions made by healthcare staff in descriptions of violent incidents involving clients. This exploratory study aims to address this issue by establishing the utility and validity of the LACS with staff accounts of violent incidents and exploring the extent to which nurses make similar or dissimilar attributions about the same patient's behaviour. An additional aim is to trial the use of the Camberwell Family Interview (CFI: Rutter & Brown, 1966; Brown & Rutter, 1966) as a format for obtaining staff accounts of violent incidents in this research. The following exploratory research questions were made:

1. do staff make attributions in accounts of violent incidents involving patients and can these be extracted and coded using the LACS?

2. are there individual (between-staff) differences in the type of attributions made for the violent behaviour of a target patient

3. is the CFI an appropriate structured interview for obtaining staff accounts of violent incidents involving patients?

5.2 Method

5.2.1 Context and participants

The study took place in a 65 bed medium secure psychiatric hospital and participants were eight qualified nursing staff (Registered Mental Nurse - RMN or Registered Nurse for the Mentally Handicapped – RNMH). Of these, 4 were male and 4 were female. All staff worked on one ward in the hospital; a 25 bed long-term rehabilitation ward catering for patients with severe and enduring mental health problems. Ethics approval for the pilot study was obtained from both the University of Swansea and West Glamorgan Health Services Authority Ethics Committees.

One patient on the unit participated in the study in that staff were required to talk about and answer questions concerning this specific patient's presentation. Staff were interviewed about this one particular patient who they all knew well, having worked with him for between four and six years. The patient was a 40 year old male with a diagnosis of schizophrenia. He was detained under Section 37/41 of the Mental Health Act (1983) under the category of 'Mental Illness' following a conviction for 'wounding with intent'. The patient had been an in-patient on the unit for some six years, although he had been detained in various hospital settings for the previous 15 years. He had been involved in total of 68 violent incidents which involved physical restraint by staff during the four year period prior to the study (records were only available for this time period), but had also been involved in many other (unrecorded) violent incidents which did not result in restraint. These include both physical and psychological violence. The recorded incidents ranged in severity from making threatening gestures to punching staff and fellow patients sufficient to cause physical injury in the form of cuts and bruising.

5.2.2 Procedure

The patient was given verbal and written information about the study and agreed to participate (Appendix I & II). The patient's Responsible Medical Officer (RMO) was briefed about the study both verbally and in writing and agreed for the patient to participate as described (Appendix I & II). The RMO confirmed that the patient had capacity to give informed consent.

All qualified nursing staff (N = 12) working on the ward were contacted by letter (Appendix III) and provided with an information sheet to explain the research (Appendix I). Staff were then contacted directly by the researcher to answer any queries and invite individuals to participate. Of the 12 staff contacted, two refused to participate and two were unavailable for interview during the period of the study. The signed agreement to take part and to be audio-taped were collected prior to involvement.

5.2.3 Measures

Camberwell Family Interview(CFI): The CFI was developed by researchers interested in measuring expressed emotion in the families of people with schizophrenia (Rutter & Brown, 1966; Brown & Rutter, 1966). Data from such interviews has previously been used to extract and code attributions using the LACS (Brewin, MacCarthy, Duda & Vaughn, 1991). The CFI (Vaughn & Leff, 1976; Leff & Vaughn, 1985) was used to elicit information about the behaviours of the patient as perceived by the staff as well as their attributions concerning conflict involving the target patient. One of the reasons that the CFI was selected as a potentially useful interview format is that the questions generally invite the interviewee to provide descriptions of events in which they have been involved rather than specifically asking 'why?' It is not until the end of the interview that such a question is put to the interviewee. Whilst the interview will always

commence with the same question, subsequent questions are not rigidly asked in a set order but rather follow the lead of the respondent. Issues raised by interviewees are followed up in order to allow them to develop themes which they perceive to be relevant. This flexible style of questioning allows the respondent to tell their story with minimal constraints put on their account by the interviewer (Hollway & Jefferson, 2000).

The interviews were conducted by the researcher, who had previously undergone training in the administration of the CFI. These were audio-taped and then transcribed. Passages of text following key questions in the CFI were coded using the Leeds Attributional Coding System (LACS) (see below). The key questions were:

1. One of the ways that this kind of trouble can affect people is to make them more irritable, and by that I mean more snappy and likely to fly off the handle over things that wouldn't normally worry them. I wonder how often do you find [the patient] to be irritable?

2. Can you think of time when he was irritable and describe what happened.

3. And how often has he been irritable with you in the last week?

4. Can you cope with his irritability?

5. Does it lead to an atmosphere on the ward when he's irritable?

6. Has he attempted to hit anyone?

Staff were also asked what they thought had caused the patient to behave as he does:

What do you think has made him like this?

Interviews each took approximately 30 minutes. An example of an interview sequence can be found in Figure 5.1. In this extract, the interviewer asks the initial questions as set in the CFI, and then goes on to encourage the respondent to say more about an issue that he/she brought up (the change in the amount of anger expressed over time).

Figure 5.1 Example of interview sequence

Interviewer: One of the ways that this kind of trouble can affect people is to make them more irritable, and by that I mean more snappy and likely to fly off the handle over things that wouldn't normally worry them. I wonder how often do you find [the patient] to be irritable?

Interviewee: *When he's frustrated we tend to get a more threatening side of him and very very rarely it ends in a physical altercation. Mostly he's quite beatific in his appearance. He'll be sitting smiling, very calm, serene and chatting to the radio or to himself…or smiling having a conversation with an unseen third party. But when he's frustrated, when we've said no to him, that's when he becomes more sort of threatening… his facial expression actually changes markedly. He becomes very visibly hostile.*

Interviewer: I wonder if you can remember a time when he was irritable and describe to me what happened?

Interviewee: *God! How many do you want?!*

Interviewer: What about the most recent one?

Interviewee: *Fairly standard procedure…this is several of those where his behaviour has been unacceptable for whatever reason. He's taken into the observation lounge and he pulls the curtains off or something like that. Because when you take him to the observation room to try and talk to him, he exacerbates his symptoms. He will refuse to talk to you, he looks out the window, he shouts out the window. And if you, you know, draw the curtains in order to focus his attention back in, he'll rip the curtains off. And that has happened on a number of occasions. That certainly, as an individual I get feelings of annoyance inside me and I guess maybe a year ago I'd have expressed that more angrily. But then you can't blame somebody for their illness.*

Interviewer: So the amount of…right, you were saying that before you might have got more annoyed with him about it…so has that changed…the amount you've shown anger to him since you've known him?

Interviewee: *Yes, yes. I mean, there's a…it depends a lot on what he's doing as well. I mean, sometimes he's so obviously distraught and disturbed. Those are the times when no reasonably responsible nurse could feel anything but compassion for him. There's other times when he's quite deliberately acting in such a way as to provoke and disrupt…and you know, like he may say, there's two female patients one of which he's obsessed with, and he'll go and stand and stare at her. You'll say 'move away please, don't stare at her, she doesn't like it'. So you'll turn around and two seconds later he's back there, and then you say 'o.k. come and sit this side of the pillar, no problem, you can't see her then, you're fine'. Then he comes and moves around again. Now these are the sort of things he will, he will do…and that can be frustrating yeh, because these are things that he will actually deny staring at her as he's staring at her. So that's frustrating. I'm not saying it…it ever becomes anything other than firm nursing intervention. It certainly is frustrating, yes.*

Leeds Attributional Coding System (LACS): Attributions were extracted from the transcripts and coded following the procedures set out in the LACS manual, for controllable-uncontrollable and internal-external (for staff and patient), and for stable-unstable. An example of a coded passage with extracted attributions (cause and outcome) can be found in Figure 5.2. In line with the LACS manual, an outcome is indicated by means of a forward or backward slash depending on whether or not the cause precedes or follows it. The cause is shown by means of an arrow underlining the appropriate part of the text with the arrow head pointing towards the relevant outcome. For example, in the first attribution shown in Figure 5.2, the outcome is the patient being quiet/withdrawn and the cause is his illness. Dimension definitions and examples can be found in Table 5.1[7].

Figure 5.2 Example of coded passage

…/sometimes he is very quiet er withdrawn that is his illness as well, where he just goes to sleep. /Other days he's very irritable, especially around the other patients. But it's all pertaining to his drink. That is what he's irritated at, because the other patients know that we've got him on this regime and er they inform us if they catch him by the water or sneaking to the loos, and because of that he gets irritated with them/, and it can lead to minor confrontation.

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[7] Some of the content in Tables 5.1 & 5.2 and Figures 5.1 & 5.2 have been altered in order to protect the identity of the patient

Table 5.1 The LACS dimensions and descriptions

LACS Dimension	Brief Definitions	Examples
Stable-Unstable (k=.91)*	Refers to the enduring nature of the cause and whether such a cause is likely to operate for future outcomes of a similar nature	*He will block it out, it's his way* (stable) *It's been happening everyday I'd say, for the past week or so, he's not very well at the moment* (unstable)
Global-Specific (k=.21)*	Refers to the importance of the cause and it's impact in terms of the outcome	*I don't feel irritable with him I tend to always see him as a vulnerable person* (global) *He becomes quite angry and aggressive when he can't get his own way* (specific)
Internal-External (patient) (k=.70)*	Refers to whether or not the cause is seen to originate within the individual being rated or to have an outside cause	*I don't get irritable with him because he's a very vulnerable person* (internal to patient) *He does get very irritable and restless and bad tempered because of the restrictions imposed upon him* (external to patient)
Internal-External (Staff) (k=.85)*	Refers to whether or not the cause is seen to originate within the individual staff member or to have an outside cause	*You may come in and be slightly tactless and it might start something going* (internal to staff) *We find it difficult to keep him away from the others in this sort of space* (external to staff)
Personal-Universal (k=.20)*	Refers to whether or not the cause indicates something unique about the person	*He has this tendency to stare at the girls which can be very irritating for the others* (personal) *I try not to get at him too much because it would be seen as punitive* (universal)

Controllable-Uncontrollable (Patient) (k=.62)*	Refers to whether or not the individual being rated is seen to have control over the outcome	*And that gets into a restraint from there <u>because he just won't accept being guided away, he's determined to get there</u>* (controllable by patient) *<u>His mental state interferes with the activities on offer</u> because he can be quite disruptive* (uncontrollable by patient)
Controllable-Uncontrollable (Staff) (k=.68)*	Refers to whether or not the staff member sees him/herself to have control over the outcome	*He said 'I'm going to get you back' <u>because I said 'that's not good for you'</u>* (controllable by staff *<u>We have to frustrate his desires</u> and then he becomes irritable* (uncontrollable by staff)

*Kappa scores are based on ratings of 50 attributions from four of the pilot study transcripts. Inter-rater reliability was assessed using the ratings of the researcher and a trained LACS rater.

5.3 Results

5.3.1 The use of the LACS

A total of 92 attributions were extracted from the eight transcripts. Individuals made between 2 and 21 attributions each with a mean of 11.5 per person. Each attribution was coded on the following dimensions: stable-unstable, global-specific, internal-external (for self and patient), personal-universal, controllable-uncontrollable (for self and patient). Inter-rater reliability for coding was assessed for 50% of the transcripts. All of the attributions made by the staff can be found in Table 5.2.

5.3.2 Comparison of attributions made by different staff

Inter-rater reliability scores were acceptable for stable-unstable, internal-external (for staff and patient), and controllable-uncontrollable (for staff and patient) dimensions, ranging from .62 to .91. According to Fleiss (1971), kappa's above .4 are considered acceptable and those above .7 are considered good. Kappa's for the global-specific and personal-universal dimensions were unacceptably low, being .21 and .20 respectively. The global-specific and personal-universal dimensions are excluded from further consideration here as a result of this reliability problem. Mean scores for the remaining dimensions were calculated for each staff member, thus giving a mean of between 1 and 3 for each dimension per staff member. Mean scores for stable-unstable ranged from 1 to 1.65 (Mean = 1.36, SD = .76); internal-external for staff from 1 to 2 (Mean = 1.23, SD = .59); internal-external for patient from 1.8 to 3.0 (Mean = 2.25, SD = .97); control for staff from 1 to 2 (Mean = 1.36, SD = .75); and control for patient ranged from 1.3 to 2.27 (Mean = 1.77, SD = .96).

Table 5.2 Attributions made by staff for the target patient

Participant 1

He can become irritable and aggressive when his requests are denied [1], or if staff interfere with his need to drink vast quantities of liquid [2], he gets very anxious about that [3]

He believes that the staff are trying to poison him at that point so he was basically aiming his anger at staff [4]

We had to remove him to the observation lounge, because of what he was displaying [5]

His behaviour had reached a point where we couldn't control him in the area he was in [6]

The other patients were becoming quite uptight and angry at him for what was going on and we therefore took the decision to remove him to the observation lounge [7]

It [his violence] seems to have lessened over the past year, especially since the move to [another ward], which is probably more reflective of a more relaxed regime [8]

He did attempt to strike staff and required restraint [9]

His religious beliefs tend to infringe on other patients, they can get quite upset and irritable back [10]

You've heard it so many times that you tend to only half listen to what he's saying [11]

There's been some concern over his mental health in that he has deteriorated somewhat over the last month or so [12]

I think he could [do more to control his behaviour] but he gets more rewards out of not [13]

It's reinforced that if you're problematic you get attention [14]

Participant 2

He does get very irritable and restless and bad tempered because of the restrictions imposed on him [1]

He has tried to hit staff because of the restrictions on him [2]

To try to de-escalate the situation, we asked him to accompany us to the observation lounge [3]

It's just that she felt uncomfortable that he was so close [4]

With this fluid programme we have a problem daily [5]

Because if he can't have fluids when he wants them he drinks from the toilet bowl [6]

We need to have a male nurse to escort him to the toilet (to ensure that he's not drinking urine from the toilet bowl) and that makes him very very annoyed [7]

Male staff...at times he feels that they're picking on him, but he's identifying a lot with women as mother figures at the moment [8]

He can get quite touchy in the morning; he won't wash because he wants to go and drink cola [9]

Weekends he gets touchy because we have a lie in and he's up early and he likes to be downstairs [10]

Sometimes he gets irritable at the social club because he wants to go and spend all his money on coke or pop [11]

It can lead to aggression when he wants to order enough money to buy himself fluids [12]

You can come in and be slightly tactless and it might start something going [13]

There may be an atmosphere because he can get on other patients' nerves and plague them [14]

I don't feel irritable with him, I tend to always see him as a vulnerable person [15]

When you are having to constantly repeat yourself and reinforce it, it can come over as a nag [16]

He stared at me really horribly, but I just took it in the context of his mental state, he was very unstable [17]

I think it's best that I give him the injection when he's aggressive rather than the younger staff as he's a wriggler 18

We don't get sufficient back up with him when there's an incident; the doctors don't feel the flavour of the ward...they just pop down for five minutes, do a quick assessment and they're gone 19

He doesn't get on my nerves but it can be difficult bearing in mind 24 other patients needs that you've got to meet 20 and he does take up a lot of time 21

Participant 3

He also he is quite angry about being detained 1

He feels that he does not need to be detained and he expresses this by urinating and defecating inappropriately 2

If his behaviour's becoming too disruptive and irritating to other patients we will take him to a quiet area 3

It can be a bit frustrating because you think this is just such a waste of time 4

His mental state interferes with the activities on offer because he can be quite disruptive 5

When he's frustrated we tend to get a more threatening side of him 6

He'll have a period of maybe a day where you're constantly chasing him because he's been so disruptive 7

I'd have expressed that more angrily but then you can't blame somebody for their illness 8

We have to frustrate his desires, and he becomes irritable 9

We've nagged him rotten over drinking, I think there was a definite therapeutic reason it had to be done 10

Sometimes he's so obviously distraught and disturbed...those are the times when no reasonably responsible nurse could feel anything but compassion for him 11

...that can be frustrating because he will actually deny staring at her as he's staring at her 12

He lunges for it again so somebody gets in his way to stop him 13

And that gets into a restraint from then because you don't...he won't just accept being guided away 14

He's determined to get there and it escalates into violence 15

Participant 4

He said 'I'm gonna get you back' because I took some of his squash back 1

He snapped at me because I said 'that's not good for you' 2

It's been happening every day I'd say for the last week or so, he's not very well at the moment 3

You feel a right heel sometimes because he's eying this thing up with...almost salivating 4

And I watched him walk over to it, pick it up and pour it straight out, so I got off the telephone and went over and told him it wasn't suitable 5

He does become agitated, physically agitated, he needs to be taken for time out 6

That makes him irritable when we try and get him to do something 7

He's been institutionalised for many years or something...more than half his life. He gets angry about that and he can't see there's any logic to it 8

I try not to get at him too much because it would be seen as punitive 9

In this sort of space, we find it hard to keep him away 10

Participant 5

And at times he can display great anger and frustration at being kept here 1

He can show his anger and actually hit and attack staff and other patients as well. I think it's all tied up with what's happening to him 2 and his mental state as well 3

He becomes quite angry and aggressive when he can't get his own way 4

We've had to include a fluid intake regime because any opportunity he'll go to the toilet and drink 5

He becomes angry because he feels cola is good 6

When it was explained to him that this was not acceptable, he became quite angry 7

He had to be restrained because he became very critical towards staff 8

With him sometimes it's like banging your head against a wall because it doesn't seem to go in 9

You can feel quite frustrated because you're not really talking on a level that's understood by both 10

He'll blame somebody else and you can become quite frustrated 11

There doesn't seem to be an answer, it can be quite difficult to control 12

I don't think we're really helping him because of his mental state 13

You can't continually nag him to do something because there's no kind of comprehension...understanding there to rationalise or understand what we're trying to do 14

He can verbalise himself quite loudly at times and I think this is because of the way he is 15, or because of the situation he finds himself in 16 [...] because of his mental state as well 17

Participant 6

We were forced to restrain him because he refused to comply with our requests 1

It all started with him attempting to drink excessive amounts of water due to his mental state 2

Participant 7

Some days he's very irritable, especially around the other patients, but it's all pertaining to this drink 1

The other patients inform us if they catch him by the water or sneaking to the loos and because of that he gets irritated with them 2

He'd had his drink but decided he wanted more so he picked the squash up 3

Because he'd done that, I was called 4

He brings his teeth together and talks with his teeth gritted, I suppose he does that to show bravado 5

It's the same I suppose in any closed environment; that makes them all irritable at times 6

The television is too loud, he'll get irritable with that 7

Because of his actions, we end up spending more time with him 8

He has this tendency to stare at the girls and that can be very irritating for the others 9

And he will block it out, he doesn't want to know 10

It's his way and he won't be told any other way and as such he will go off and it doesn't matter what you say 11

Participant 8

He got verbally aggressive so we asked him to stop 1

When he gets very agitated I try to sit with him and explain why things are how they are. I can seem to calm him down then 2

---

n.b. cause is underlined

In answer to the question 'what has made him like this?', staff provided various opinions. Only one person could not give any cause. Most staff provided a range of potential causes and these included family history, genetics, schizophrenia, institutionalisation, learned behaviour, stress, and the environment. All of the individual staff's opinions on this issue can be found in Table 5.3.

5.3.3 Supplementary explorations of the data

The extent to which staff spontaneously mentioned emotional responses to violent patient behaviour was explored. It was found that six out of eight transcripts included information about such emotional reactions (such as that they felt anger or sympathy towards the patient), even though such information was not explicitly requested from staff.

5.3.4 Usefulness of the CFI

It was possible to extract and code attributions from accounts of violent behaviour from staff obtained using the semi-structured interview format of the CFI. However, as the CFI includes questions relating to a wide range of patient behaviours, a large amount of the interview data was redundant.

Table 5.3 Staff's views on the general causes of the target patient's difficulties

Participant 1.	*I think there's a lot of family dynamics that have to be explored, especially his…the effect of his uncle on his care. There's also a degree…because he's been in institutions for so long… institutional psychosis drifting in that he's picked up from other patients. So I think it's multi-faceted, the cause.*
Participant 2.	*Well what do you think of schizophrenia? It's environmental…his mother has a schizophrenic illness which has a lot to do with it, and his background and upbringing has been fairly chaotic and fragmented. And he's been in institutions for many years so he's fairly moulded, shaped, and very damaged.*
Participant 3.	*Take your pick. If I could say what causes schizophrenia I'd be a rich man. Certainly I think, my personal belief is to go along with the argument that everybody has a genetic possibility and then your upbringing and your learnt behaviours and associations will encourage that and give it the opportunity to develop, and maybe a certain pressure is the one that will make it snap. Certainly [the patient] appeared to have a normal development until he went up away to stay with his uncle who I don't know, I'm not entirely sure about his family, was a South African, involved in some extreme white movement or whatever. His father always maintains that he came back from that very very disturbed. That's where he stabbed someone and got into a special hospital, and that's they seem to say, where it started. But then his uncle appears to be schizophrenic as well, so certainly very very disordered if not schizophrenic his uncle is. So you could say it'd just been brewing and the pressures of being with his uncle caused the actual onset. Or it might have been that he'd been quietly developing the illness for many years under the tutorledge of his uncle and that finally did it.*
Participant 4.	*I think it's probably a mixture of factors. There is some evidence to suggest that other members of his immediate family have got mental illnesses. If you were going on the tack that it's an inherited chemical imbalance or whatever, or also I would very much suspect the relationship that he had with his uncle and the relationship that he has with his family are fairly, I don't know, fairly typical sort of schizophrenogenic family sort of thing, and also he's been in institutions for many years now and I'm sure we're seeing the product of a mixture of influences and picking things up off other people, and just being locked up.*
Participant 5.	*I think it's a difficult situation to be in. What does Laing say? Laing says that people in abnormal situations behave in abnormal ways.*

Participant 6.	*I don't know. I'm not really sure what's wrong with him.*
Participant 7.	*Well I don't think he had a very good start in life and, I personally think there's something wrong with his uncle, who he spent a lot of time with. If he was brought up by his uncle I can understand why he's turned out this way because I think he's mad as well. Just his actions as well. He's one of the strangest people. I'm sure if a couple of doctors got together and had him under the whatever it is, checked out, we'd have a bed here for him. He's just like him, and yet he's in here and he's not.*
Participant 8.	*He's mentally ill, schizophrenic.*

5.4 Discussion

This study was carried out for three reasons, firstly, to pilot the use of the LACS with nursing staff's accounts of violent patient behaviour, secondly, to explore the range of nurse attributions for a particular individual patient, and thirdly, to examine the appropriateness of the CFI as an interview structure for obtaining accounts which can be analysed using the LACS. The findings suggest the LACS can be used to extract and code attributions from nursing staff's accounts of violent patient behaviour and that there are individual (between-staff) differences in the attributions made about a target patient. In terms of the use of the CFI, whilst the flexible format did appear useful for eliciting information concerning staff attributions, emotions and behaviours in relation to violent incidents involving patients, a large amount of redundant data was also generated. Thus using the interview in it's entirety is perhaps not appropriate.

The first aim, to explore the utility and validity of the LACS in this context, was important because the tool had not been used in this particular setting previously. The findings from the present study suggest that nursing staff do make attributions in interviews about violent patient behaviour which can be extracted using the LACS. It was found that the LACS can be used to code attributions from this type of data i.e. transcripts of interviews with staff concerning their experiences of violent patient behaviour. Acceptable or good inter-rater reliability was found, with the exception of the global-specific and personal-universal dimensions. These dimensions have also been found to have poor inter-rater reliability in other studies (Silvester, 1997; Stratton et al., 1986).

An exploration of individual differences in attributions of nursing staff revealed that there were individual variations in terms of both the number of attributions made by different staff (range 2 – 21) and the nature of those attributions. An examination of the transcripts from the nurse interviews in this study reveals that there were apparent individual

differences in nurse attributions concerning the same patient when considering attributions for patient. This suggests that different nurses have their own individual perceptions of the same patient and his behaviour. Thus despite staff being interviewed about the same target patient who they were all very familiar with, they were not consistent (across staff) in their explanations of the causes of violent behaviour involving that patient.

An examination of the transcripts revealed that different nursing staff appeared to make quite different attributions about the causes of the patient's violent behaviours. Consider first the following excerpts:

> *'...he uses his religious traits to go off on a tangent, and he will go off on a completely different tangent as well. And he will block it out. He doesn't want to know. It's [his] way and [he] will not be told any other way and as such he will go off on one and it doesn't matter what you say, in the end he'll just turn around and completely ignore you.'*

> *'I think he could [do more to control his behaviour] but he gets more rewards out of not. He gets more attention for not controlling his behaviour than he would if he did.'*

The nurse in the first excerpt makes attributions which are internal to and controllable by the patient (*He doesn't want to know*) and external to and uncontrollable by themselves (*It doesn't matter what you say, in the end he'll just turn around and completely ignore you*). The nurse in the second excerpt also implies that the behaviour is within the control of the patient (*he gets more rewards out of not*).

The next two excerpts show a different perception of the patient's behaviour:

'…he can verbalise himself quite loudly at times and I think this is because of the way he is, or because of the situation he finds himself in. He sees that we're keeping him here whereas he should be allowed to go and maybe that's why he does…why he has this behaviour…then because of his mental state as well.'

'I think that part of his irritability is fairly normal really. He's been institutionalised for 15 years or something…more than half his life. He gets angry about that and he can't see that there's any logic to it.'

The nurses in these last two excerpts tend to make uncontrollable attributions for the patient. Sometimes these are seen as external to the patient (*this is because of the situation he finds himself in* and *he's been institutionalised for many years*) and at other times internal (*because of his mental state*). These attributions are external and uncontrollable by the staff. However, not all situations involving the target patient were considered to be outside of the control of staff:

'When he gets very agitated I try to sit with him and explain why things are how they are. I can seem to calm him down then.'

Although other staff did not feel that they had control when the patient was agitated:

'He's determined to get there and it escalates into violence'

There was less variation in mean scores between nursing staff for attributions for self and for the stable-unstable dimension. The scores suggest that staff were more likely to view causes as external and uncontrollable for self, and as unstable.

The results from this exploratory qualitative study show that the LACS can be used to extract, code and compare, nurses attributions about violent patient behaviour from interview transcripts. The results suggest that staff's attributions concerning patient behaviour are not always driven by patient variables and there is variability in attributions for patient when staff discuss the violent behaviour of one target patient well known to all participants.

Also there was lack of range of responses for the stable-unstable dimension, with staff being more likely to view causes as unstable. As this study involved just one patient, it is unclear whether this was a result of individual patient factors.

Although the CFI provided an interview format which elicited attributions from staff about violent incidents involving a target patient, many questions are included which concern other patient behaviours, such as self-care skills, which are not of direct relevance to this thesis. Therefore, a large amount of redundant information is produced. It may be more appropriate, therefore, for a semi-structured interview format to be developed specifically for the purposes of this research.

Although this study did not set out to explore staff's emotional reactions to the patient and his behaviour, it was noted that six out of eight of the staff interviewed spontaneously mentioned their emotional reactions to the patient's violence. This suggests that it may be possible to rate emotional responses from interview transcripts.

It would appear that the LACS is an appropriate measure to use for the present thesis. This tool will therefore be used more systematically to examine nursing staffs' attributions concerning violent incidents in the next study.

CHAPTER SIX

Study 1: Healthcare Staff Attributions for Violent Incidents involving Male and Female Patients – A Field Study

6.1 Introduction

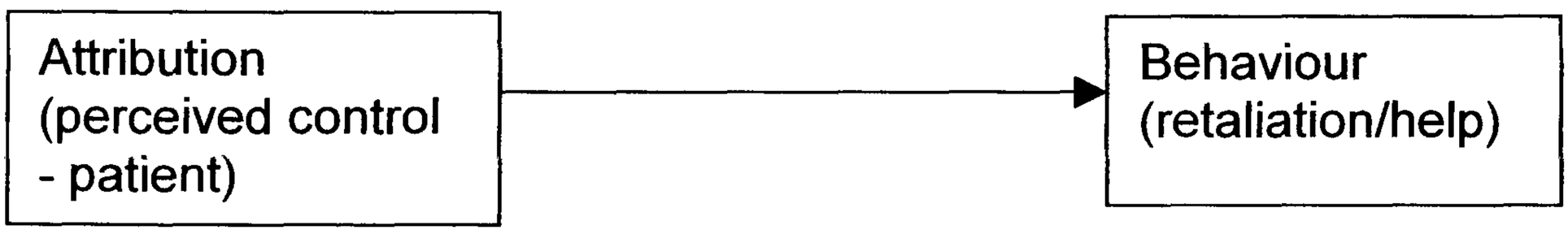
Violence in the workplace is a significant problem. In 2001, 0.9% of all employees in England and Wales experienced at least one physical assault at work (Upson, 2004). Healthcare professionals have an elevated risk; 3.3% of those surveyed had been physically assaulted at work during the year studied. This figure is likely to be much higher for nurses in specialist psychiatric settings for whom the management of aggressive patient behaviour is a day-to-day responsibility (Torpy & Hall, 1993). Indeed, the rate of injury to care staff from patient assaults now exceeds that of construction workers: a group of employees traditionally viewed as having the most dangerous occupation (Flannery, 1996).

Given the high costs of this violence for employees, employers and patients (Whittington, 1994; Whittington & Wykes, 1994) it is not surprising that researchers have sought to identify factors likely to contribute to the aetiology of violent incidents. Those proposed to date have included previous history of violence (Monahan, 1981), diagnostic category (Noble & Rodgers, 1989), stage of illness (Davis, 1991), patient gender (Convey, 1986), environmental factors (Whittington & Wykes, 1996), and attitudes of care staff (Durivage, 1989). However, despite growing evidence that explanations for episodes of conflict have an important influence on how individuals choose to respond (e.g., Bugental, Blue, Cortez, Fleck, Kopeikin, Lewis & Lyon, 1993; Bugental, Lyon, Krantz & Cortez, 1997), relatively little attention has been paid to the role of cognitive factors in the exacerbation or successful resolution of violent incidents (Lopez & Wolkenstein, 1990). This study attempts to refocus attention upon the importance of cognitive factors by investigating naturally occurring causal attributions. These attributions were produced by care staff in a psychiatric secure unit when completing record forms following incidents of patient restraint. Using forms completed for every episode of violent patient behaviour leading to the restraint of a patient over a four-year period, two central research questions were explored.

First, to what extent are management strategies such as use of seclusion, medication and length of restraint associated with care staff perceptions of patient control over causes of violent episodes? Second, does patient gender influence the type of attributions that care staff make for violent incidents, and their subsequent choice of management strategy?

Weiner's (1995) attribution-emotion-action model of helping versus violent retaliation is used as a framework for this study. Essentially, Weiner proposes two possible pathways by which attributions of control influence behaviour. One is a direct route from attribution to behaviour, and the other indirect where the attribution-behaviour relationship is mediated by emotional responses. This study specifically examines the link between controllability attributions and behavioural responses (see Figure 6.1) which could be considered to be Pathway 1 of Weiner's model. This predicts that perceiving the patient to have high control over the causes of the violent incident will be associated with punitive (retaliatory) responding, whereas perceiving the patient to have low control will be associated with helping behaviour.

Figure 6.1 Pathway 1



The proposed mediating emotion is not considered here i.e. the prediction that the relationship between attributions of control and behavioural response are mediated by emotion (which could be considered to be Pathway 2), is not investigated.

Some previous research in this area has examined pathway 1[8]. In a seminal piece of research, Brewin (1984) found that medical students were more willing to engage in helping behaviours and prescribe medication when they perceived patients to have little control over the events leading to their medical condition. However, when patients were perceived to have more control over such events, help was less forthcoming. Thus, the quality of medical care depended, in part, on the health-care professional's causal attributions and moral evaluation of the patient (Weiner, 1995). Since this early research several studies have used attribution theory as a framework to explore and predict clinical decisions concerning the dangerousness and treatability of patients among care staff. For example, Sharrock et al. (1990) presented nursing staff in a medium secure unit for mentally disordered offenders with vignettes of hypothetical negative patient behaviours. Staff were asked to imagine that each behaviour had been demonstrated by a single 'real' patient currently on the unit, and then rate it on a number of causal dimensions. In terms of Pathway 1, they found that the more controllable by the patient the cause was rated by staff, the less likely they were to engage in helping behaviours.

Reid and Millard (1997) investigated attributions made by care staff for the causes of convicted patients' index offences (including murder, attempted murder, aggravated burglary, grievous bodily harm, actual bodily harm, kidnapping and indecent assault) that had led to their detention at a UK maximum security hospital. They too found that when care staff rated the cause of the index offence as controllable by the patient, patients were rated as less treatable. Similarly, Dagnan et al. (1998) found that care staff working with individuals with learning disabilities showed less willingness to help when a patient was perceived to have control over their challenging behaviour. More recently, Stanley

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[8] For the purposes of this introduction, research findings concerning Pathway 1 only will be considered. More detailed discussion of the studies cited here can be found in Chapter 3 (3.2.6).

and Standen (2000) asked 50 care staff to rate six hypothetical case studies of patient challenging behaviour. They found that the more outer-directed the patient behaviour (as opposed to inner-directed behaviours such as self-injury), the greater the carers' attributions of control for patient and the less propensity to help.

These studies provide some support for Pathway 1 of Weiner's (1995) model. Wanless and Jahoda (2002) however, found contradictory results. Their study differed from those detailed above in that, in addition to examining healthcare staff's attributions concerning hypothetical scenarios and patients, they looked at attributions for actual situations in which the staff had been involved. In contrast to previous findings, and somewhat surprisingly, they found that perceiving patients as in control of the causes of negative behaviour was associated with helping. This is opposite to the predicted association and counter-intuitive. Jones and Hastings (2003) also failed to replicate the support for Pathway 1 found in previous studies. In their investigation into attributions, emotions and behaviours of staff working with people with learning disabilities who exhibit self-injurious behaviour, they found no significant associations between attributions and reported behavioural intentions. Findings from previous research therefore provide mixed support for the view that care staff attributions can be an important determinant of how they respond to patients and, thus, the aetiology of violent episodes.

A number of criticisms can be levelled at previous investigations. For example, most studies have relied upon the investigation of few incidents and a small number of clients. As a consequence findings are often difficult to generalise. Furthermore, most researchers have studied inferred behavioural responses. That is, what care staff say they would do, rather than consider how staff actually do behave towards clients. Studies have also focused on hypothetical situations and/or clients rather than actual episodes and real people. Furthermore, the most typical methodologies have used questionnaires and vignettes, rather than free-

response formats, to elicit causal attributions. Although questionnaires and vignettes have a clear advantage in being able to produce quantifiable, standardised and comparable material (Hewstone, 1989), the ecological validity of these measures is open to question (Kelley & Michela, 1980). We simply do not know whether care staff would produce similar attributions spontaneously during real interactions.

Finally, despite evidence that the general public and professionals such as the police interpret violent episodes involving men and women differently (Wilczynski, 1991), researchers have neglected to consider patient gender. This is despite research findings which suggest that behaviour demonstrated by offending women is more typically explained in terms of situational factors (Carlen, 1988) or internal-uncontrollable causes such as personal pathology (Allen, 1987). Horn and Hollin (1997) also found that both police and non-police participants perceived female offenders as being less deviant or 'fundamentally bad' than male offenders. Harsh punishment was generally viewed as inappropriate for women, who were considered to be more likely to benefit from rehabilitation than men. Given such findings regarding male and female offenders, it seems likely that patient gender may also influence care staff attributions, such that male patients may be perceived as having more control over violent episodes than women. If this were the case then the pathway depicted in Figure 6.1 would predict that staff would be more likely to help female clients and to respond in a punitive manner towards male clients.

The present study examines attributions made by male and female care staff in contemporaneous accounts of a large number of violent incidents involving patients using the Leeds Attributional Coding System (LACS) (Stratton et al., 1988). It is a field study investigating naturally occurring attributions produced by care staff following violent incidents and recorded as written accounts on 'restraint forms' as part of standard hospital procedures. Such restraint forms represent an ideal focus for

research. Not only is there evidence that individuals are most likely to engage in attributional activity when they encounter novel, surprising and potentially threatening events (e.g., Weiner, 1995), but restraint forms also require care staff to explain the aetiology of violent incidents and use of management strategies. The attributions are described in the person's own words and are not artificially constrained by the use of imposed causal dimensions and questions. Whilst care staff's emotional responses to the incidents are not provided in the documentation, actual behaviour in the incidents is. This takes the form of such variables as the length of time that they restrained patients for and whether or not they provided medication and implemented the seclusion procedure. It is also possible to examine associations between patient gender and health care staffs' attributions, an area where previous research is particularly sparse.

The study examines a number of behavioural responses of staff which can be construed as helping or punitive. The documentation includes data concerning nurse behaviours which could be considered to fall into the former category such as provision of medication, and those that fall into the latter category such as the use of seclusion. The rationale for considering seclusion to be a punitive response requires some consideration here. Although seclusion is viewed by some as a therapeutic technique, others suggest that it is inhumane and violates human rights and may in fact be used by staff in a punitive manner (see Browne & Tooke, 1992). Despite the fact that the Mental Health Act (1983) Code of Practice (Department of Health/Welsh Office, 1999) states that seclusion should be used as a last resort and for the minimum amount of time possible, solely for the containment of severely disturbed behaviour which is likely to cause harm to others, healthcare staff do not always appear clear about the circumstances under which it should be used (Morrison & Lehane, 1995). The frequency with which seclusion is used across psychiatric inpatient settings varies considerably (Browne & Tooke, 1992) which suggests that different units are applying different standards regarding it's use and that some facilities may be using

seclusion inappropriately. Patients have reported that they view seclusion as a punitive measure rather than a means of containment (Tooke & Browne, 1992) which is associated with very negative feelings, including depression, anger, confusion, and disgust (Plutchic, Karrasu, conte, Siegel & Jerrett, 1978), which may be long lasting with some patients continuing to report bitterness when interviewed a year later (Wadeson & Carpenter, 1976). For the purposes of this study, seclusion is viewed as a punitive response.

It is predicted that the management strategies used by care staff will be more 'punitive' when patients are perceived as having control over the causes of violent incidents, but strategies will be more 'help' focused when patient control is perceived to be low. In terms of gender differences, it is predicted that male patients will be perceived to have more control over violent incidents that female patients. More specifically, it is predicted that:

1 there will be an association between more control attributed to patients by care staff and the use of seclusion (hypothesis 1)

2 there will be an association between more control attributed to patients and longer periods of restraint (hypothesis 2).

3 the prescription of medication (a help strategy) will be associated with lower levels of control for patients (hypothesis 3).

4 care staff will make different attributions for violent episodes involving male and female patients such that: male patients will be perceived as having greater control over the causes of a restraint incident than female patients (hypothesis 4)

5 female patients will be more likely than male patients to be prescribed medication (hypothesis 5)

6 male patients will be more likely to be secluded than female patients (hypothesis 6).

6.2 Method

6.2.1 Context and Participants

The study is set in a 65 bed medium secure psychiatric hospital, which caters for patients detained under sections of the Mental Health Act (1983). All inpatients at the hospital are formally detained because they have mental health problems and have either committed an offence or cannot be managed as informal (voluntary) patients. At any one time there is a care staff-patient ratio of 1:3.5 with 60% of the staff being qualified. Qualifications are either RMN (Registered Mental Nurse) or RNMH (Registered Nurse for the Mentally Handicapped), these both being three year courses leading to a qualification in nursing recognised by the UKCC. The remainder of the care staff are unqualified Care Support Workers whose work is supervised by qualified staff.

The use of physical restraint to manage aggressive behaviour is a last resort and is not used as a matter of course. It is only advocated at the hospital in emergency situations where there appears to be a real possibility that significant harm would occur if such an intervention were not made. Thus incidents which result in the use of physical restraint represent a proportion of all aggressive incidents occurring at the hospital. At the time of the study, no formal record of incidents of conflict *not* resulting in physical restraint were kept, other than the patients' individual records. However, documentary evidence of each episode of restraint has always been required. Following recommendations of the Mental Health Act (1983) Code of Practice (Department of Health and

Welsh Office, 1999) that each incident be documented and reviewed. The hospital policy reflects this guidance in that it requires that every time that physical restraint of a patient is used an 'Aggressive Incident Record Form' be completed.

Physical restraint forms allow the senior nurse involved in an episode to provide their own account of the incident and to offer recommendations regarding the patient's care. Staff are required to respond to four free response questions on each form, asking them first to describe the incident, second whether verbal diffusion was used prior to the incident, third, whether in their judgement the incident could have been avoided, and finally, whether they have any recommendations for future action. Factual information is also requested concerning the duration of restraint, use of medication, whether or not seclusion was used, as well as details of injuries to staff or patient. The following is a typical example of information provided in the free response sections of a completed form:

1 Please describe the incident *[Patient] was called at 7.45 a.m., at approximately 8.10 he came out of his bedroom demanding a bath, staff explained that this was now not possible as staff numbers and patients meant that we need to go down stairs and we would provide bedroom access later in the day.*

2 Was verbal diffusion used? *On many occasions [staff] asked [patient] not to walk towards him in a threatening manner, he was given plenty of opportunity to back off but chose not to.*

3 Could the incident have been avoided? *The incident could not have been avoided as [patient] was given every opportunity to avoid assaulting staff.*

4 Have you any recommendations for future action? *It is my opinion that the incident was dealt with professionally and would hope that in future cases it would be handled the same.*

6.2.2 Procedure

Incident Severity Codings: Forms were coded for the severity of the incident they described in two ways. First, in terms of the duration of episodes of physical restraint. For this purpose, duration was categorised as 'high' (over 20 minutes), 'medium' (10-20 minutes) or 'low' (less than 10 minutes). Second, the severity of injuries to those involved were categorised using a classification system developed by Fottrell (1980). Incidents were rated '1' when no physical injury was detectable or suspected; '2' refers to incidents where minor physical injuries (e.g. bruises, abrasions, small lacerations) are received; and '3' to incidents where major physical injury (e.g. large lacerations, fractures, loss of consciousness; need for special investigations e.g. blood test, permanent physical disability or death) occurred. Codings were made separately for injuries to staff and patients.

Staff Behavioural Resonses: Responses of staff were coded in two ways. First, whether or not the incident led to the use of seclusion which was rated 'yes' [1] or 'no' [0]. Second, whether or not the incident led to the use of medication was rated 'yes' [1] or 'no' [2].

Leeds Attributional Coding System (LACS): Causal attributions were extracted and coded using the Leeds Attributional Coding System [LACS] (Munton et al., 1999; Stratton et al., 1988). In accordance with Brewin et al. (1991) the extracts to be rated comprised passages of text in which mention of one or more specific causal factors could occur and the extract could mention causal factors at opposite ends of the same dimension. Thus there may be a combination of controllable and uncontrollable causes mentioned within the same extract. In such cases,

a rating was made for the entire passage of text on the basis of frequency of uncontrollable and controllable attributions. This represents a modification of the LACS for use of the method in clinical settings and was considered to be particularly appropriate for application to the field study data used in the present study.

Each attribution was coded for the extent to which the staff member completing the form was perceived to have any measure of control over the outcomes during the episode [CS] and the extent to which control was attributed to the patient [CP]. Attributions were therefore coded separately for patient and staff member as, theoretically, they could both be expected to have control or no control. Thus in the following example, the form was rated as uncontrollable by both patient and staff:

> *'....John is v disturbed on some mornings and engages in steadily worsening attempts at assault (punching). PRN ineffective as was all attempt at distraction/diffusion... He can be completely unresponsive to PRN/verbal diffusion and ultimately a danger to others when psychotic.'*

The following definitions were used to code attributions. An attribution was rated as controllable by staff [3] when there were reasonable grounds to support the view that the staff member would normally manage to significantly influence the outcome in the absence of exceptional effort or circumstance. For example, the following attribution produced in response to question four (Have you any recommendations for future action?) was coded controllable:

> *'The review of treatment (medicine & staff approach to care) may improve the situation.'*

An attribution was rated uncontrollable for staff [1] when there were reasonable grounds to support the view that the causal sequence is

believed by staff to be inexorable or the outcome inevitable in normal circumstances. For example:

> *'The patient's intent to achieve physical confrontation made avoidance impossible.'*

An attribution was rated neither controllable nor uncontrollable for staff [2] where there was no clear indication of controllability or otherwise for staff on the form. For example:

> *'Verbally abusive to member of staff. When approached attempted to grab staff.'*

Attributions for control for patients [CP] were rated in the following way. An attribution was rated as controllable by patient [3] where there are reasonable grounds to support the view that the patient would normally manage to significantly influence the outcome in the absence of exceptional effort or circumstance. For example, where it was suggested that the behaviour is learnt, attention seeking or "behavioural" this would be coded as controllable by the patient. Where a patient was said to have refused medication, this was deemed controllable by the patient unless there was clear evidence on the form that the refusal of medication was beyond the patient's control on this occasion. An example of an attribution coded controllable by the patient would be:

> *'He deliberately provoked a situation and then attempted to take the opportunity to assault others.'*

A form was rated as uncontrollable by patient [1] where there are reasonable grounds to support the view that the causal sequence is believed by staff to be inexorable or the outcome inevitable in normal circumstances. For example, where the patient's mental state (psychotic, unsettled etc.) is mentioned as relevant, this is coded as uncontrollable by the patient unless there was clear evidence that this factor was considered to be under the patient's control or if there was more

compelling evidence about other factors. In addition, loss of temper was coded uncontrollable, in the absence of contradictory evidence. An example of an attribution coded as uncontrollable for the patient would be:

> *'Incident a product of patient's delusional behaviour.'*

A form was rated as neither controllable nor uncontrollable by patient [2] where there was no clear indication or controllability or otherwise for the patient on the form. For example:

> *'Whilst on session over social club, S attempted to assault fellow patient by trying to drag him off the settee.'*

In addition forms were also rated as 'no explanation' where it was explicitly stated that the staff member completing the form had no explanation for the incident [0] otherwise forms were rated [1]. An example of where a rating of 0 was given is:

> *'...there was no indication that she would attack someone – entirely unpredictable assault.'*

Reliability of ratings was established by having 100 (17.9%) of the extracts rated by a second judge. Interrater reliability for CS was 82% (kappa = .56) and for CP was 74% (kappa = .53). Whilst this is not high, kappa values of above .4 are considered acceptable and those above .7 are considered good (Fleiss, 1971).

6.3 Results

During the four year period between January 1994 and December 1997 a total of 557 physical restraint forms were completed, each detailing a

separate incident of restraint. These forms were completed by 58 different care staff (32 (55.2%) male and 26 (44.8%) female) documenting the physical restraint of 114 patients. Of the 58 care staff 45 (77.6%) had completed between one and ten restraint forms, 8 (13.8%) between 11 and 20 forms, 1 (1.7%) between 21 and 30 forms, and 4 (6.9%) had completed 31 or more forms. One member of staff had completed 71 forms. Of the 114 patients, 105 (92.1%) had between one and ten forms completed concerning them, 4 (3.5%) between 11 and 20, 2 (1.8%) between 21 and 30, and 3 (2.6%) had more than 30 forms completed. One patient had 70 forms completed concerning them.

In the four year period studied, a total of 380 patients were admitted to the unit, this included 30 patients who were readmitted. Consequently, the total number of patients for whom forms could have been completed during this period was 350. Thus 114 (32.6%) of the total number of patients resident during this period were subject to physical restraint procedures. Of the 350 patients admitted during the time period in question, 310 (88.6%) were men and 40 (11.4%) were women. Of those actually physically restrained, 97 (85.1%) were male and 17 (14.9%) were female. Thus, 31% of all male patients and 43% of all female patients were restrained at some point during their detention. The ages of patients subject to control and restraint procedures ranged from 17 to 67 years (mean = 31, S.D. 10.67).

According to the Mental Health Act (1983) classifications, of the patients admitted, 321 (84.5%) were classified under Mental Illness, 35 (9.2%) under Psychopathic Disorder, 28 (7.4%) under Mental Impairment or Severe Mental Impairment (some patients had more than one classification and/or different reasons for detention on different admissions). Of the restrained group, 92 (80.7%) were classified under Mental Illness, 18 (15.8%) under Psychopathic Disorder, 7 (6.1%) under Mental Impairment or Severe Mental Impairment (again, some patients had more than one classification).

6.3.1 Statistical analysis

Chi-square was used to investigate the association between attributions and behaviours. A-priori power analysis calculated that the minimum sample size as 145 assuming a medium effect size (Faul & Erdfelder, 1992).

The naturalistic nature of this data set presents a challenge for statistical analysis. For example, some of the care staff completed more than one restraint form, similarly some patients were involved in more than one restraint episode. However, condensing the data so that each patient and each member of staff appears only once vastly reduces the number of restraint forms available for analysis (e.g. episodes of seclusion reduce from 58 to two), making it extremely difficult to test the hypotheses. Similarly Log-linear modelling is inappropriate because too few observations were available per individual within each level, and the data has more than one tier of observations (i.e. patients and care staff). Therefore, the data were not condensed. Although Chi-square could normally be used to test for associations with categorical data, it relies on the assumption of independence of scores. This assumption overcomes the possibility that results from one or more individuals who contribute a disproportionate number of scores might be influencing the results. A possible solution is to explore the data set in more detail in order to determine whether individuals who either produce large numbers of restraint forms (i.e., care staff), or who are involved in large numbers of restraint episodes (i.e., patients), provide different patterns of attributions to those of the other groups. Thus, the homogeneity of the data set was tested by comparing random samples (N=10) of restraint forms selected for 1) individual staff who produced 1-5, 6-10, 11-20 and 20+ restraint forms, and 2) individual patients for whom 1-5, 6-10, 11-20 and 20+ restraint forms are completed. Descriptive statistics are provided in Table 6.1 which indicate that mean scores for control-self and control-patient do

not appear to vary substantially across the categories. Using Kruskall Wallis Tests to test for differences for control-self and control-patient for each of the two samples found no significant differences. The data set is therefore treated as homogenous and χ^2 is used to test for associations (see Silvester, Ferguson & Patterson 1997).

6.3.2 Tests of Hypotheses

Overall, 446 (80.1%) forms were rated uncontrollable by staff, 57 (10.2%) controllable and 54 (9.7%) as neither controllable nor uncontrollable. In terms of attributions for patients, 134 (24.1%) forms were rated uncontrollable by patient, 140 (25.1%) controllable and 283 (50.8%) neither controllable nor uncontrollable. Incidents were more likely to result in seclusion when staff rated them as controllable for the patient ($\chi^2 = 9.2$, df = 2, $p<.01$) (hypothesis one), and also when they rated them as 'neither controllable nor uncontrollable' for themselves ($\chi^2= 13.5$, df = 2, $p<.001$) (Table 6.2). However, no significant association was found between staff attributions of control for self or patient and the duration of restraint episodes (hypothesis two). The association between control for patient and control for self and use of medication was not significant (hypothesis three) (Table 6.3). In addition, medication was more likely to be prescribed when the period of restraint was longer ($\chi^2 = 7.1$, df = 2, p = .03) and when the incident did not result in seclusion ($\chi^2 = 16.1$, df = 2, p = .001).

Table 6.1 Summary statistics for samples (N=10) of restraint forms produced by/for different categories of care staff

Number of restraint forms completed by each staff member:		1-5	6-10	11-20	20+	All forms
A) by staff						
	Staff (N)	29	14	8	5	56
	Forms (N)	132	110	107	208	557
Control-patient M (SD)		2.0 (.82)	2.1 (.74)	1.9 (.74)	2.1 (.74)	
Control-staff M (SD)		1.5 (.82)	1.8 (.79)	1.4 (.70)	1.3 (.67)	
B) for patients						
	Patients (N)	94	11	4	5	114
	Forms (N)	201	88	59	210	557
Control-patient M (SD)		2.2 (.63)	2.4 (.52)	2.2 (.79)	2.0 (.67)	
Control-staff M (SD)		1.4 (.70)	1.2 (.63)	1.2 (.63)	1.3 (.67)	

Note: Means and S.D.s in each category are for 10 restraint forms completed A) by a member of staff, or B) for an individual patient, selected at random from each of the categories (e.g., 'staff who completed 1-5 restraint forms', or, 'patients for whom 6-10 forms were completed'). Higher mean scores indicate more controllable attributions.

Table 6.2 Use of seclusion and control attributed to self (nurse) and patient on restraint forms (hypothesis 1)

	Attribution for self (nurse)		Attribution for patient	
	Seclusion		Seclusion	
	No	Yes	No	Yes
Uncontrollable	399	42	128	5
Neither	39	13	242	33
Controllable	52	3	120	20
	χ^2 = 13.5, df=2, p<.001		χ^2 = 9.2, df=2, p<.01	

Note: figures in this and following tables refer to numbers of restraint forms completed for each category.

Table 6.3: Use of medication and control attributed to male and female patients (hypothesis 3)

	All patients		Male patients		Female patients	
	Medication		Medication		Medication	
	No	Yes	No	Yes	No	Yes
Uncontrollable	32	52	21	44	11	8
Neither	87	86	35	41	52	45
Controllable	112	92	26	19	86	73
	χ^2 = n.s.		χ^2 = 7.2, df=2, p<.03		χ^2 = n.s.	

The associations between staff attributions of control for self or patient and the duration of restraint episodes (hypothesis two), and between control for patient and control for self and use of medication (hypothesis three), were not significant. However, when the data was considered separately for male and female patients, use of medication for male (but not female) patients was significantly associated with uncontrollable attributions for patient (χ^2 = 7.2, df = 2, p = 0.03) (Table 6.3). In addition, significant differences were found in terms of control attributed to male and female patients. Nurses made more uncontrollable attributions for male patients and were more likely to make attributions that were neither controllable nor uncontrollable for female patients (Table 6.4). Thus hypothesis four was not supported. Also, contrary to prediction (hypothesis five), female patients were more likely to be secluded than male patients (χ^2 = 57.6, df = 1, p<.001) (Table 6.5).

Table 6.4 Control attributed to male and female patients – all restraint forms (hypothesis 4).

	Male Patients	Female Patients
Uncontrollable	110	24
Neither	169	114
Controllable	93	47

χ^2 = 20.5, df=2, p<.001

Table 6.5 Use of seclusion with male and female patients (hypothesis 5)

	No Seclusion	Seclusion
Male Patients	353	13
Female Patients	137	45
	χ^2 = 57.6, df=1, p<.001	

Additional exploration of attributions revealed that care staff were more likely to state that they had no explanation for incidents involving female patients (χ^2 = 34.9, df = 1, p < .001). This finding remained significant when the two most frequently restrained females were excluded from the analysis (χ^2 = 11.6, df =1, p <.01). Moreover, when staff stated that they had no explanation for a violent incident, they were more likely to make uncontrollable attributions for themselves (χ^2 = 11.00, df = 2, p < .01) and attributions which were 'neither controllable nor uncontrollable' by the patient (χ^2 = 70, df =2, p < .001).

Finally, attributions made for frequently and infrequently restrained patients were compared. Two groups were created. Group A included patients who had been restrained more than 10 times (N = 9: 7 men, 2 women) and resulted in a total of 258 restraint forms Group B comprised patients who had been restrained less than 10 times (N = 105: 81 men, 24 women) and resulted in 299 forms. Findings indicate that staff made significantly more controllable attributions for themselves in incidents involving group B (infrequently restrained) than for group A (frequently restrained) (χ^2 = 11.8, df = 2, p<.005). However, no significant association was found between the groups and level of control attributed to patients.

6.4 Discussion

This study set out to investigate naturally occurring attributions made by care staff for themselves and patients on a psychiatric secure unit following incidents of restraint. The decision to study this type of attribution was based on the need to address limitations of previous research. The model of helping behaviour versus retaliation (depicted in Figure 6.1) may help to explain why in some instances staff choose to provide help to violent patients, and in others to use more punitive responses. This study aimed to build upon the research already conducted in this area in a number of ways. As noted previously, studies which have examined care staffs' attributions about negative patient behaviour have tended to deal with small numbers of participants (e.g. Sharrock et al., 1990) and hypothetical vignettes rather than real situations and people (e.g. Dagnan et al, 1998). In addition, they have relied almost exclusively on questionnaires to measure attributions (e.g. Stanley & Standon, 2000). The research has also looked exclusively at helping behaviour but has not considered other potential responses such as neglect and retaliation (e.g. Sharrock et al., 1990). It has also not considered patient gender issues (e.g. Cottle et al., 1995). In summary, the study found that:

1. seclusion was more likely to be used with patients when staff perceived the cause of the incident as 'neither controllable nor uncontrollable' for themselves ($p < .001$), and 'controllable' by the patient ($p < .01$) (hypothesis 1)

2. in the case of male, but not female, patients medication was more likely to be prescribed when staff perceived the incident as 'uncontrollable' by the patient ($p = .03$) (hypothesis 3)

3. female patients were more likely to be secluded than male patients ($p < .001$)

4. care staff were more likely to state that they had 'no explanation' when describing incidents involving female patients ($p < .005$)

5. staff perceived themselves as having more control over incidents involving infrequently restrained patients group compared with frequently restrained patients ($p < .01$).

Returning to the part of Weiner's (1995) model being tested here (see Figure 6.1), control for patient was significantly associated with the punitive response of seclusion for both male and female patients. However, perceiving causes as uncontrollable for patient was significantly associated with the helping response of provision of medication for male patients only. It is of interest that the attribution-behaviour association holds for both male and female patients when the outcome is punitive, but not when it is help-oriented. This highlights the importance of considering both patient gender and alternative behavioural responses to helping (i.e. retaliatory or punitive responses) when applying the proposed model to clinical settings. Findings from previous research in this area are limited by their lack of acknowledgement of these influential issues.

Overall, these findings provide mixed support for the six hypotheses. As predicted, seclusion was more likely to be used in situations where staff attributed control to patients (hypothesis one). It is possible that when patients are perceived to have control over their violent behaviour, staff experience higher levels of anger and that this in turn results in more coercive management strategies (e.g., Dagnan et al., 1998; Fenwick, 1995; Weiner, 1995). Thus, staff may use seclusion punitively as a means of regaining a feeling of control over such incidents.

Hypothesis two was not supported: longer restraint episodes were not associated with higher levels of control attributed to patients. However, partial support was found for hypothesis three such that medication was more likely to be prescribed when incidents were perceived as uncontrollable by male patients. The same was not found for female patients. Findings for male patients are similar to those of previous research (e.g., Brewin, 1984) and suggest that help-giving strategies are more likely when patients are perceived to have less control over their circumstances. The identification of a gender difference raises the intriguing possibility that different cognitive processes may operate when staff evaluate violent behaviour in female patients.

Somewhat surprisingly, additional findings relating to gender were contrary to prediction. For example, because offending behaviour by women is more typically attributed to external or internal-uncontrollable causes in comparison with that of men (Allen, 1987; Carlen, 1988) it was predicted that male patients might be perceived to have more control over violent episodes than female patients. Consequently, male patients might also experience more instances of seclusion and less prescription of medication than female patients. In this study levels of control attributed to male and female patients for violent incidents were similar. Moreover, contrary to prediction, female patients were more likely to be secluded and less likely to receive medication than male patients.

Such gender differences need to be explained. In reality, research investigating violent episodes involving male and female patients has produced contradictory findings. Whilst physical violence in the general population is more common in men than in women (Maden, 1993; Walmsley, 1986), this association does not appear to hold when considering individuals with mental health problems. Although the nature and targets of the violent behaviour may differ (Robbins et al., 2000) the actual frequency does not appear to be significantly different in male and female psychiatric populations (Gudjonsson et al., 2000; Monahan et al,

2001, Swanson et al., 1990). This may not be taken into account by clinicians when they assess risk of violent behaviour. For example, in a study of the accuracy of clinicians' predictions of violence (Lidz et al., 1993) found that, despite being significantly better than chance at predicting violence in patients overall, clinicians were no better than chance at predicting violence in female patients. Coontz et al. (1994) also found that clinicians interviewing perpetrators of violent acts in a psychiatric emergency room assessed dangerousness significantly differently in male and female patients. When interviewing women clinicians referred less to the violent act that precipitated admission and returned to the subject of violence less often than with men. Similar results were obtained in a more recent study (Elbogen, Williams, Kim, Tomkins & Scalora, 2001) who in addition found a gender interaction effect such that female clinicians were more likely than their male counterparts to underestimate the dangerousness of female patients.

One explanation for the present findings may be that violent behaviour by female patients was less expected by care-staff. Certainly, there was a greater likelihood of care staff explicitly stating that they had 'no explanation' for incidents involving women compared with those involving men as the following excerpt illustrates:

> *"There was no foreseeable way that this restraint could have been avoided as [the patient] made a totally unprovoked and unexpected attack on staff".*

Words such as 'unprovoked', 'unexpected', and 'unpredictable' were frequently found in descriptions of violent incidents involving female patients. Incidents that are unpredictable and difficult to explain have been identified as being particularly stressful (Bromley & Emerson, 1995). Consequently it may be partly a lack of explanation which staff find threatening, resulting in them adopting more assertive and controlling behaviours such as seclusion (Silvester & Chapman, 1997). It is also important to consider the finding that female patients may in fact be more

likely to be violent than their male counterparts in some settings. Thus, Rutter, Gudjonsson and Rabe-Hesketh (2004) in a study of violent incidents in a medium secure unit, found that the odds of persistently violent patients being female rather than male was 5:1. Women patients may be admitted to such units precisely because they exhibit violent behaviour which is very difficult to manage.

These findings suggest that certain professionals may find it difficult to understand and accept violent acts perpetrated by women. Clearly there is a need to investigate the findings of the present study further as these suggest that the traditional attributional model of helping behaviours may hold for aggressive incidents involving male patients but not for those involving female patients.

The identification of differences in attributions made for men and women underscores the importance of studying naturally occurring attributions in naturalistic contexts, where attributions from a large number of care staff for a wide range of patients can be investigated. However, as has been seen, the analysis of attributions recorded on restraint forms is not without its limitations and findings from this study should be treated with caution. A typical difficulty associated with field studies is also the absence of control data. No data was available for attributions made by care staff for patients when conflict did not result in physical restraint. Assuming that care-staff need to deal with aggressive behaviours from patients on a day-to-day basis, an exploration of attributions made by staff when incidents are resolved successfully or without the use of restraint could prove informative. For example, are patients more likely to be perceived as having control over their behaviour when restraint is used rather than not used? Clearly, findings from field research should inform more controlled investigations involving questionnaire and vignette methodologies with larger samples of staff and patients.

Another important question that arises from this research is whether individual differences in attributional style could influence the way in which different care-staff explain patient behaviour. There is growing evidence that individual differences in attributional style predict an individual's level of reactivity to, and subsequent behavioural response towards, difficult interpersonal situations (Bugental, Blue, Cortez, Fleck, Kopeikin, Lewis & Lyon, 1993; Bugental, Lyon, Krantz & Cortez, 1997). Yet few studies have considered the role of individual differences in attributional style as a predictor of subsequent helping behaviours. The findings from this study emphasise the importance of investigating attributions for patient behaviour in context. However, further longitudinal research is needed in order to improve our understanding effective management of conflict and ultimately to improve the recruitment and training of individuals caring for challenging patients.

6.5 Conclusions

As can be seen, a number of questions are generated by the results of this study. These concern firstly, the validity of Weiner's (1995) attribution-emotion-behaviour model for staff in relation to female patient violence as opposed to male patient violence; secondly, possible different applicability dependent on the type of behavioural response studied (helping versus punitive, retaliatory responses), thirdly, the influence of emotion in Weiner's (1995) model which was not tested in the present study; and fourthly, the issue surrounding individual differences in attributional style remains unresolved i.e. to what extent are nurses' attributions about patient violence influenced by factors within the patient and to what extent by factors within themselves? The next study aims to address these issues by examining nursing staff's attributions, emotions, and behaviours concerning violent incidents involving male and female patients.

CHAPTER SEVEN

Study 2: The Influence of Patient Gender on Staff Attributions, Emotional and Behavioural Responses to Violent Incidents

"Her voice was ever soft, gentle and low, an excellent thing in a woman."

William Shakespeare
King Lear

7.1 Introduction

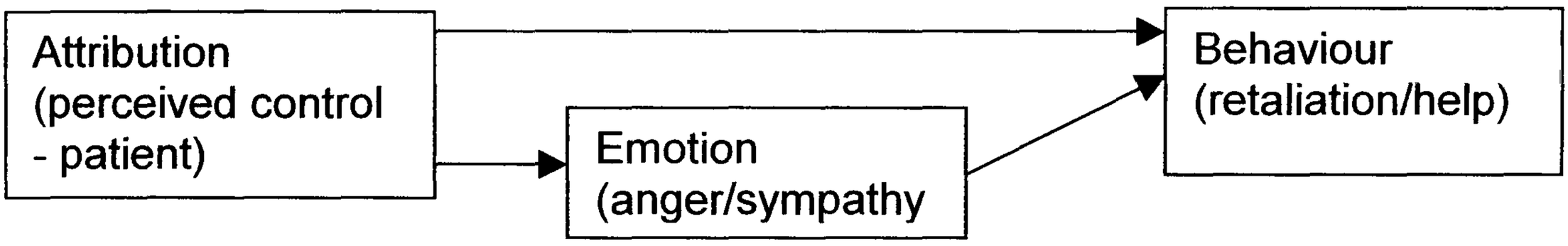
Since a large proportion of all patients admitted to medium secure settings exhibit violence at some point during their detention (Gudjonsson, Rabe-Hesketh & Wilson, 1999; Torpy & Hall, 1993), healthcare staff working in such settings are often faced with the unusual situation of having to provide care in situations of intense conflict. It is clear that certain staff are better able to de-escalate violent interactions than others (Ray & Subich, 1998). Some workers, rather than calming a situation, may actually retaliate in a violent manner themselves (see Shepherd, 1996).

What motivates a staff member to help rather than to neglect or retaliate when confronted with violent patient behaviour is unclear. One potential framework within which to examine this issue is the theory of social motivation proposed by Weiner (1980) which has been applied to both helping behaviour and violence. Weiner (1995) argued that these behaviours are in fact two sides of the same coin and, as part of his theory, proposed an attribution-emotion-action sequence to explain why one person might be more likely to help than another in a given situation. The way a person explains an event, particularly a negative or unexpected one, is seen to be an important mediator of the emotional response to such an event and this in turn is postulated to influence subsequent behaviour.

Weiner's (1995) model would predict that a healthcare worker who perceives a violent situation to be within the control of the patient is likely to experience feelings of anger and demonstrate a retaliatory response (e.g. use of punitive strategies). Alternatively, a worker who perceives an incident to be uncontrollable by the patient is more likely to feel sympathetic and demonstrate help-giving behaviour (e.g. provision of medication). Weiner's model also predicts a direct (but weaker) link between attributions of control and behaviour, such that perceiving the

incident as controllable by the patient may lead directly to retaliatory behaviours. Similarly, perceiving the incident to be uncontrollable by the patient may lead directly to help-giving. Weiner (1995) proposes that emotional responses act as mediators between attributions of control and behavioural responses. Figure 7.1 illustrates the model as applied to healthcare workers dealing with violent incidents.

Figure 7.1 Weiner's (1995) model



Essentially, this model can be seen as comprising two pathways. One (this will be called Pathway 1) goes direct from the attribution to the behaviour. This pathway is depicted in Figure 7.2. The other (this will be called Pathway 2) goes from the attribution, via emotion, to the behaviour. This pathway is depicted in Figure 7.2. Pathway 1 was tested in the previous study of this thesis. The present study aims to test both pathways.

Figure 7.2 Pathway 1

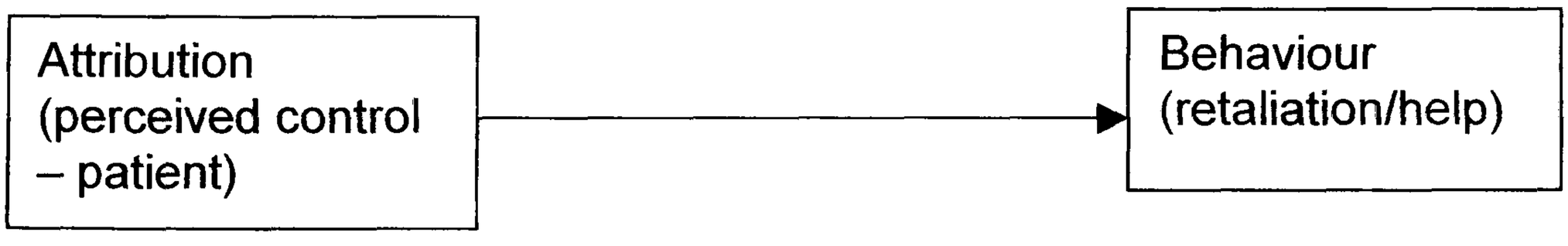
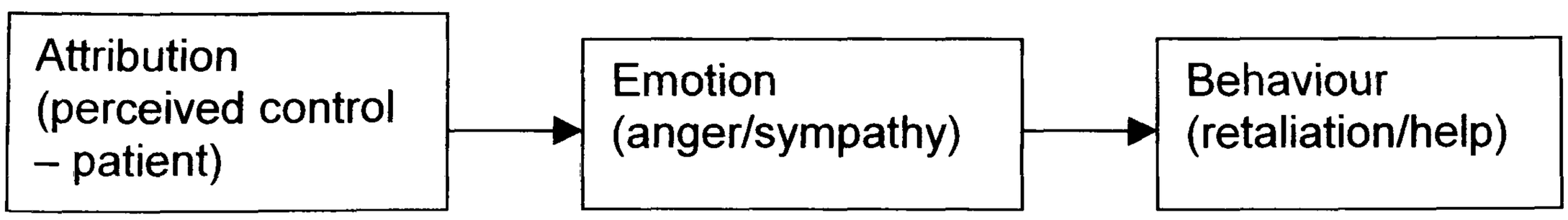


Figure 7.3 Pathway 2



Weiner's (1995) model was developed on the basis of findings from research with groups who were not tasked with helping violent clients as part of their professional roles, such as members of the public confronted with a drunk or sick person who had fallen on the subway (e.g. Piliavin et al., 1969). The act of neglecting an individual or retaliating with violence however, has very different implications for a healthcare worker dealing with a patient in his/her care and a member of the public responding to, for example, a drunk stranger. Healthcare staff have a 'duty of care' to their patients and failing in this duty would not be considered acceptable given the care role. The case of David 'Rocky' Bennett who died at a UK medium secure unit following a violent incident during which staff physically restrained him (Blofield, 2003) illustrates this. The jury at the inquest returned a verdict of 'Accidental Death aggravated by Neglect' which clearly has implications for the staff involved whose behaviours were examined by police investigating the case and which were subject to scrutiny in the subsequent inquiry. Cases such as this draw attention to the onus upon healthcare staff to provide appropriate care in situations where patients are behaving in a violent manner.

In order to evaluate the validity of Weiner's (1995) model in clinical settings, some researchers have attempted to apply it to healthcare workers dealing with difficult patient behaviours (e.g. Sharrock et al., 1990). A number of these have examined part of the proposed model; Pathway 1, which predicts a direct relationship between attributions of control for violent incidents and helping behaviour (depicted in Figure 7.2), and found some support for this (e.g. Brewin, 1984). Thus Brewin found that medical students' attributions concerning the causes of patients' medical problems were associated with reported intentions to help patients (by prescribing medication).

Pathway 1 depicted in Figure 7.1; the direct association between attributions of control for violent incidents and the behavioural responses (helping versus punitive or retaliatory) of psychiatric nursing staff, was

examined in the previous study of this thesis. The findings indicated that high perceived control for patient was associated with retaliation, as predicted by the model. For helping behaviour however, Pathway 1 held only when considering the violent behaviour of male patients; it did not hold for female patients. Specifically, it was found that when outcomes were perceived to be controllable by patients, staff were more likely to react in a punitive manner. Conversely, where outcomes were perceived as uncontrollable by patients, staff were more likely to help, but only in the case of male patients.

The previous study in this thesis did not address Pathway 2; the emotional responses of staff were not considered. Therefore, the proposed meditating influence of emotions (Weiner, 1995) was not tested. Previous research in this area has provided mixed support for this pathway.

Two studies are supportive of Pathway 2. Dagnan et al., (1998) carried out a study with care staff (N = 40) working with people with learning disabilities. Staff were asked to identify possible causes of challenging behaviours of hypothetical patients, choose the most likely cause, and rate attributions, emotions, and helping behaviour. The researchers found that when the patient was perceived as more able to control the cause of a challenging behaviour, care staff were more likely to display negative emotion, and a reduced willingness to offer help. The second study which provides evidence for the existence of Pathway 2 was carried out by Stanley and Standen (2000) who asked 50 care staff to rate six case studies representing actual incidents of challenging patient behaviour. Ratings included: control for patient, negative/postive affect, locus, stability, and helping. The researchers found that outer-directed behaviours such as violence were associated with attributing high control to the patient, negative affect and the less propensity to help.

Certain other research is less supportive. Sharrock et al. (1990) for example, examined 34 healthcare staff's explanations of 14 hypothetical (negative) behaviours attributed to an actual patient on the medium secure unit in which they worked. The study also examined staff's emotional responses (anger and sympathy) to the behaviours. In addition the researchers looked at the association between care staff's explanations and reported helping behaviour, using a rating scale in which care staff had to indicate the amount of extra effort they would exert in helping the patient. The only relationship which was supported was the negative one between high perceived control for patient and sympathy.

Jones and Hastings (2003) also found little support for Weiner's (1995) Pathway 2. They investigated the relationships between 123 health care staff's attributions, emotions and behaviours in relation to self-injurious behaviour of patients. They showed staff videos showing either a situation where the behaviour was maintained by attention, or escape/avoidance of task demands. Staff then completed questionnaires concerning their emotional reactions, attributions, and helping behaviour. No association was found between attributions of control and negative affect or between attributions and reported behavioural intentions. The postulated mediating role of affect between causal attributions and helping behaviour was not supported. Some significant relationships were found between attributions and emotions, however. In the attention-maintained scenario, control for patient was associated with feeling more confident and relaxed. Attributing causes to factors external to the patient was associated with feelings of depression and anger. In the escape-maintained scenario, staff were more likely to report feelings of depression and anger when they perceived the causes as internal to patient.

Wanless and Jahoda (2002) compared attributions made by 38 healthcare staff in relation to hypothetical vignettes with those made in

connection with actual violent incidents in which they had been involved. The staff rated their attributions, emotions, and helping behaviour in relation to these on 7-point rating scales. Wanless and Jahoda found that negative emotions were more commonly expressed when staff described actual events in which they had been involved than when they were responding to hypothetical vignettes. For both the vignettes and the actual incidents, perceiving clients as having high control was associated with anger. However, contrary to prediction, high perceived control for patient was associated with reported intentions to help. Perhaps more surprisingly, anger was associated with helping behaviour whereas sympathy was not.

Thus, whilst some research suggests that Weiner's (1995) attribution-emotion-behaviour model is an appropriate framework within which to consider healthcare staff's responses to challenging client behaviour (e.g. Dagnan et al., 1998), other studies are less supportive of the model in it's entirety (e.g. Sharrock et al., 1990), with some research findings being contrary to the model (e.g. Wanless & Jahoda, 2002).

The research in this area has various methodological limitations including the use of hypothetical, rather than real, clients (e.g. Dagnan et al., 1998), and scenarios (e.g. Jones & Hastings, 2003), and an overwhelming reliance on questionnaire and rating scale methods as the sole means of measuring attributions, emotions, and behaviours (e.g. Stanley & Standen, 2000). There are also theoretical difficulties, for example, the emotions of anger and sympathy are frequently considered to be opposite ends of a continuum rather than being considered separately. There is also the issue of focus, with a lack of consideration being given to the potential influence of client gender, and concentration on only one behavioural response (help) whilst ignoring possible alternative responses (such as retaliation).

The present study tests the proposed model depicted in Figures 7.1, by examining attributions and emotional reactions (sympathy and anger) in addition to behavioural responses (help and retaliation) of nursing staff when involved in violent situations with patients. Specifically, the predicted mediating role of emotions is tested. Pathways 1 and 2 are tested (Figures 7.2 and 7.3). The present study aims to address some of the limitations of previous research in this area by investigating staff's descriptions of actual incidents in which they have been involved. This represents an alternative methodological approach to the use of hypothetical scenarios which, whilst having the benefit of consistency across research participants, lack the contextual detail found in real incidents, and do not take into account the relationships which healthcare staff have with their patients. Issues of the applicability of questionnaire methodology are also tackled in the present study, which examines 'spontaneous' causal beliefs, and rates emotional and behavioural responses from transcribed discourse rather than using self-report rating scales. Another issue which the present study addresses is the consideration of an alternative behavioural response in addition to help; that of retaliation. Although punitive responding was addressed in the first study reported in this thesis, it is not an issue which has been considered in previous research in this area. This is arguably an omission since healthcare staff may respond with help or retaliation towards violent patients who they are tasked with treating (see Shepherd, 1996). Indeed, it has been suggested that therapist neutrality is a myth (Bennett, 2001). Sullivan (1931) claimed that the notion of 'clinical detachment' is a fancy of the clinician as it fails to take into account the 'chiefly immeasurable, imponderable interplay going on in and within the complex of physician-patient-and-others-relevant' (p.979). Thus the idea that healthcare staff invariably approach patients in an objective manner, providing the same care irrespective of their own perceptions of a situation and emotional responses to it, could be considered questionable.

Previous work in this area is further developed in this study in that gender differences in the applicability of the model depicted in Figure 7.1 are explored. Given the finding that professionals may view the causes of female violence differently to that of males (e.g. Horn & Hollin, 1997), are poorer at assessing their risk of violent behaviour (e.g. Lidz et al., 1993), and use different disposal options on conviction of violent offences (Wilczynski, 1991), this would appear an area worthy of study. The previous study in this thesis indicated that attributional models of helping may hold differently for male and female patients. This study seeks to replicate this finding.

In terms of Pathway 1 (Figure 7.2), it is predicted that there will be a direct relationship between high perceived control for patient and retaliation (hypothesis 1). It is also predicted that there will be a direct relationship between low perceived control for patient and helping [hypothesis 2], but for male patients only.

In terms of Pathway 2 (Figure 7.3), it is predicted that high perceived control for patient will be associated with high staff anger (hypothesis 3), which in turn will be associated with retaliatory responses (hypothesis 4). Anger will act as a mediator between high perceived control for patient and retaliation (hypothesis 5). It is further predicted that low perceived control for patient will be associated with high staff sympathy (hypothesis 6), which will in turn, be associated with helping behaviour (hypothesis 7). Sympathy will act as a mediator between low perceived control for patient and helping (hypothesis 8).

Staff attributions of control for self will also be explored. In addition, the influence of the attributional dimensions of internal-external, and stable-unstable will be examined. Previous research in this area has found these dimensions to be of relevance. Jones and Hastings (2003) for example, found that attributing causes to factors external to the patient was associated with feeling of anger and depression in staff. Also,

Gudjonsson and Sigurdsson (2004) have found external attributions to be associated with violent offences. Other research suggests that perceiving causes of negative patient behaviour as stable is associated with decreased optimism, which is important since optimism has been found to be associated with helping behaviour (Sharrock et al., 1990)

7.2 Method

7.2.1 Context and Participants

The study was carried out with nursing staff working in a 71 bed medium secure psychiatric hospital[9]. The hospital caters for patients who are detained under criminal and civil sections of the Mental Health Act (1983). Nursing staff are qualified as either RMN (Registered Mental Nurse) or RNMH (Registered Nurse for the Mentally Handicapped).

All of the qualified nursing staff at the hospital who had undergone training in management of violence in the form of 'De-escalation of Aggression' and 'Care and Responsibility' (C&R) courses (N=52) were contacted by letter (Appendix IV) and asked to take part in the study. One refused and thus participants were 51 qualified nurses (RMN or RMNH). All 51 nursing staff completed every stage of the project. Of these, 25 (50%) were male and 26 (50%) were female. The mean age of participants was 37.2, length of post-qualification experience 9.2 years, and length of time working in the unit 5.2 years.

7.2.2 Procedure

Ethics approval for the study was obtained from the Gwent LREC. Staff were contacted by letter to explain the research and were then contacted directly by a research worker to answer any queries and invite individuals to participate. The signed agreement to take part and to be audio-taped (Appendix V) were collected prior to involvement.

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[9] This is the same hospital in which the previous study took place. The number of inpatient beds increased between the two studies.

Semi-structured interview: Each participant was interviewed using a semi-structured interview format devised for the purposes of the study (see Appendix VI). The interviews were conducted by a research worker (a qualified nurse) who was blind to the aims and hypotheses of the study. This individual was trained to conduct the interview. Each interviewee was asked to recall four patient conflict situations (two involving males patients and two involving female patients) in which they had been involved and describe what happened to the interviewer. The patients were not identified by name. The participant was not initially told that situations concerning both male and female patients would be required. They were asked to relate an incident of their choosing and were prompted from there to ensure that two incidents concerning male patients and two concerning females were described.

Attributional analysis: The interviews were recorded on audiotape for analysis. They were then transcribed and coded using the Leeds Attributional Coding System (LACS) (Stratton et al., 1988) which allows coding of attributions in spoken discourse. Unfortunately, three of the tapes were found to be of poor quality due to background noise and could not be transcribed. Thus, a total of 48 tapes (male staff: N=24; female staff: N=24) were analysed and these included descriptions of 192 scenarios each involving a different patient. In line with the LACS manual instructions (Stratton et al., 1988), attributions were initially extracted from the transcripts and the cause and outcome identified for each. Then, each attribution was coded along the following dimensions: Stable-Unstable, Internal-External and Controllable-Uncontrollable. The former two dimensions were coded for the attribution as a whole while the latter two were coded separately for Speaker and Patient. For each dimension a coding of '1', '2', or '3' is given. Table 7.1 shows criteria for coding '1' and '3'. A coding of '2' is made where there is insufficient evidence for a coding of '1' or '3'. Brief definitions of the LACS dimensions with examples from the nurse interviews can be found in Table 7.1. An

example of part of a transcript from which attributions have been extracted can be found in Figure 7.4. In line with convention, an outcome is indicated by means of a forward or backward slash depending on whether or not the cause precedes or follows it. The cause is shown by means of an arrow underlining the appropriate part of the text, with the arrow head pointing towards the relevant outcome.

For a total of 10% of the transcripts (N = 6 nurses, N = 24 scenarios), extractions were made by two independent raters; the researcher and a rater trained in the use of the LACS. Good reliability was obtained (k = .96). These extractions (N = 182 attributions) were also were also independently coded by the two raters along the LACS dimensions for reliability purposes. Table 7.1 shows Kappa coefficients.

Emotion and behaviour analysis: In addition to attributional analysis, each scenario was coded separately for two emotions expressed by the interviewee; sympathy and anger, using five point Likert scales. A brief description of the rating criteria and examples can be found in Table 7.2. Each scenario was also rated separately according to two behavioural outcomes; help and violent retaliation. Each of these was rated on a four point Likert scale according to the level of impact the behaviour would be expected to have on the patient. A brief description of the definitions, rating criteria and examples can be found in Table 7.3. A total of 50% of the transcripts were coded by two raters for the emotions of anger (k=.68) and sympathy (k=.76), and the behavioural responses of helping (k=0.80) and retaliation k=.85).

Analysis of stimulus situations: Content analysis was carried out to establish the nature of the stimulus situations. These were categorised according to type: 1) verbal/gestural violence; 2) physical violence; 3) other. A brief description of the definitions, rating criteria and examples can be found in Table 7.4.

Table 7.1 Descriptions of the LACS dimensions with examples from the study

Brief Description	Examples
Stable-Unstable: causes are coded 'Stable' (3) if they are perceived by the speaker to be long-lasting and have an on-going influence upon outcomes. Causes coded 'Unstable' (1) are more temporary (k = .89)*	*She was obviously going to hit out because she always does when she can't get her own way* (stable) *I think he just felt frustrated because the other patients were making a lot of noise that day* (unstable)
Internal-External (Patient): refers to the locus of the cause. An 'Internal-P' (3) cause originates in the patient (i.e. behaviour or personality) an 'External-P' (1) cause includes the situation or behaviour others (k = .80)*	*Because of the nature of his personality it was very difficult for anyone to engage positively or constructively or objectively with him* (internal to patient) *But then it was resolved because we had staff meetings* (external to patient)
Internal-External (Staff): refers to the locus of the cause. An 'Internal-S' (3) cause originates in the speaker (i.e. behaviour or personality) an 'External-S' (1) cause includes the situation or behaviour others (k = .91)*	*It was bad for me because I was at a loss myself* (internal to staff) *The area of conflict arose because he was abusive and resistant to getting out of bed* (external to staff)

Controllable-Uncontrollable (Patient): a cause is coded 'Controllable-P' (3) if the speaker indicates that the patient would have been able to influence the cause of an outcome. A cause is coded 'Uncontrollable-P' (1) if the speaker indicates that it is beyond the influence of the patient (k = .85)*	*He hadn't slept, and as he himself said it was a deliberate ploy in order to make himself psychotic* (controllable by patient) *The scenario was dragged out considerably longer because of the attitude towards the patient* (uncontrollable by patient)
Controllable-Uncontrollable (Staff): a cause is coded 'Controllable-S' (3) if the speaker indicates that they would have been able to influence the cause of an outcome. A cause is coded 'Uncontrollable-S' (1) if the speaker indicates that it is beyond the influence of him/herself (k = .89)*.	*I really did feel more annoyed with myself than the patient really that I'd allowed it to happen* (controllable by staff) *The fact that I was just cannon fodder and on the fringes of things to some extent meant that perhaps I missed out on some of the post-incident de-briefing* (uncontrollable by staff)

*Kappa's are based on 10% of all transcripts (N=6 nurses, N=24 scenarios, N=182 attributions). These were coded independently by the researcher and a trained LACS rater.

Table 7.2 Emotions: Descriptions of rating criteria for anger and sympathy emotions, with examples

Rating Criteria	Examples	
	Anger	**Sympathy**
1 = Explicit statement that no emotion (i.e.anger/sympathy) was felt	*I didn't feel angry with the patient in any way*	*I had no sympathy for him whatsoever*
2 = Insufficient evidence for the presence or absence of anger/ sympathy	*It was difficult*	*The interaction was strained*
3 = Implication that anger/sympathy was felt but not explicitly stated	*After all the time I'd spent with him, to be responded to like that was downright unfair*	*He'd been abused as a child and he'd had a really terrible life*
4 = Explicit statement that anger/sympathy was felt, but no indication that this was severe in level	*I got angry*	*I felt for her*
5 = Explicit statement that anger/sympathy was felt and indication that this was severe by use of appropriate adjective or strong word	*I became extremely angry* or *I was livid*	*I was really sorry for him* or *I felt devastated on her behalf*

Table 7.3 Behaviours: Descriptions of rating criteria for help and retaliation behaviours, with examples

Rating Criteria	Help	Retaliation
1 = No impact on patient from that behaviour	*'I didn't do anything at that point in time'*	*'I didn't say anything to her'*
2 = Mild impact on patient from that behaviour	*'I ensured that his basic needs were met'*	*'I told him off'*
3 = Significant impact on patient from that behaviour	*'He was distressed so I gave him his PRN medication'*	*'I basically squared up to him and told him what I thought of him'*
4 = Very strong impact on the patient from that behaviour	*'I stayed on after my shift had finished so that I could spend time with him going over the reasons for his detention'*	*'I got her in a hold that I knew would hurt'*

Table 7.4 Example stimulus situations within the three categories

Nature of stimulus situation	Examples
Verbal/gestural violence	*He was swearing and being abusive*
	He was taking up threatening poses
Physical violence	*I was maced in the face with an underarm deodorant*
	As he rose he threw out a punch and caught the first member of staff around the eye and temples
Other	*She was very elated and throwing herself around*
	He wouldn't take his medication

7.2.3 Analysis

For the purposes of the analysis, a mean score for each interviewee for each attributional dimension for the two scenarios involving male patients and the two scenarios involving female patients were calculated. Thus each interviewee had two mean scores for each dimension; one for situations involving male patients and one for situations involving female patients. Although this is potentially problematic since means are based on different numbers of attributions for each individual, this technique has been used in other research involving the LACS (see Munton et al.,

1999). Differences in attributions, emotions, and behavioural responses, for male and female patients were analysed using paired t-tests, Wilcoxon, or Sign tests, depending on the distribution of the data. Spearman's Correlations were used to investigate relationships between attributions, emotions, and behaviours. Multiple regression was used to test for potential moderating effects. 2-way ANOVAs were used to evaluate potential staff-patient gender interaction effects. Assuming large effect sizes, the minimum sample size for Spearmans correlation coefficient was calculated to be 42 (Faul & Erdfelder, 1992).

7.3 Results

A total of 1202 attributions were extracted from the transcripts, 637 of these were made for male patient scenarios and 565 for female patient scenarios. The mean number of attributions made per staff member was 25.5 (S.D. 15.6); 25.3 (S.D. 15.6) for male patients, and 25.6 (S.D. 15.7) for female patients. A total of 192 described scenarios were rated.

No significant difference was found in level of control attributed to male and female patients by staff ($z = -.14$, $p = .89$), although perceiving causes as more internal to female patients approached significance ($t = 1.9$, $df = 47$, $p = .06$), and staff were more likely to view causes as stable for female patients ($z = -2.4$, $p<.05$). Staff were more likely to perceive themselves as in control of situations involving male patients ($z = -2.77$, $p < .01$) and to see causes of outcomes as internal to themselves for male patients ($t = -2.94$, $df = 47$, $p < .01$).

Staff did not show a significant difference in the amount of anger expressed towards male and female patients ($z = -1.11$, $p = .27$), or sympathy ($z = -1.39$, $p = .17$). There was also no significant difference in the amount of help offered to male or female patients ($t = -1.33$, $df = 47$, $p = .19$) or retaliation ($p = .18$). Table 7.5 shows mean scores and standard deviations for ratings of anger, sympathy, help, and retaliation.

Table 7.5 **Means and standard deviations for anger, sympathy, help and retaliation for male and female patients by male, female, and all staff**

	Female Staff				Male Staff				All Staff			
	Patient				Patient				Patient			
	Male		Female		Male		Female		Male		Female	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Anger	2.07	.66	2.00	.82	2.40	.80	2.30	.68	2.25	.75	2.16	.75
Sympathy	3.09	.88	3.30	.81	2.92	.70	3.13	.82	3.00	.79	3.21	.81
Help	2.50	.80	2.14	.68	2.12	.68	2.12	.88	2.29	.76	2.13	.78
Retaliation	1.05	.21	1.20	.43	1.15	.39	1.21	.40	1.10	.33	1.21	.41

Two-way ANOVA's revealed that staff gender did not interact with patient gender to influence degree of anger, sympathy, help or retaliation.

7.3.1 Tests of hypotheses

Correlations for male and female patients can be found in Tables 7.6 and 7.7. For the purposes of analysis, Spearman's Correlations (rather than Pearsons) were carried out since some of the data were not normally distributed.

Tests of Pathway 1 (hypotheses 1-2)

It was hypothesised that high perceived control for patient would be associated with retaliation (hypothesis 1). The association was found to be significant for males (r_s=.32, p<.05), but not for females (r_s=-.03, p=.82).

It was also predicted that low perceived control would be associated with helping behaviour, for male patients only (hypothesis 2). The association was found to be significant for male patients (r_s=-.34, p<.05), but not for females (r_s=-.04, p=.78).

Therefore, Pathway 1 is supported for incidents involving male patients but not female patients.

Tests of Pathway 2 (hypotheses 3-8)

It was hypothesised that perceiving a patient to have high control over a negative outcome would be associated with high staff anger (hypothesis 3). It was found that, in the case of male patients, high perceived control for patient was associated with anger (r_s =.41, p<.01). However, high perceived control for female patients was not associated with anger (r_s=.18, p=.22). Therefore the hypothesis is supported for male but not female patients.

Table 7.6 Correlations for LACS dimensions, emotions and behaviour scores – male patients

		M	SD	1	2	3	4	5	6	7	8	9	10
1.	Staff Age	36.83	7.64										
2.	Years Experience	9.88	5.81	.27									
3.	Stable	1.27	.27	-.23	.03								
4.	Internal-Patient	1.59	.31	-.29	.06	.23							
5.	Control-Patient	1.42	.25	-.07	.22	.35*	.59**						
6.	Internal-Staff	1.77	.36	.17	.05	-.22	-.49**	-.26					
7.	Control-Staff	1.67	.30	.18	-.01	-.24	-.31*	-.09	.85**				
8.	Anger	2.25	.75	-.08	.09	.06	.40**	.41**	-.24	-.18			
9.	Sympathy	3.00	.79	-.09	.03	.14	-.05	-.32*	.01	.02	-.58**		
10.	Help	2.29	.76	.08	-.09	-.08	-.37**	-.34*	.23	.22	-.34*	.11	
11.	Retaliation	1.1	.33	.01	.06	.06	.16	.32*	.02	-.05	.27	-.23	-.45**

N=637 attributions (males) N=48 staff

High scores = stable, internal, controllable, anger, violence * = $p < .05$ ** = $p < .01$

Table 7.7 Correlations for LACS dimensions, emotions and behaviour scores – female patients

		M	SD	1	2	3	4	5	6	7	8	9	10
1.	Staff Age	37.64	8.48										
2.	Years Experience	8.47	6.10	.27									
3.	Stable	1.44	.38	-.17	-.08								
4.	Internal-Patient	1.72	.41	.00	.29*	.16							
5.	Control-Patient	1.48	.39	-.17	.02	.01	.69**						
6.	Internal-Staff	1.58	.36	-.06	-.35*	-.02	-.42**	-.08					
7.	Control-Staff	1.46	.36	-.02	-.15	.09	-.36*	-.06	.73**				
8.	Anger	2.16	.75	-.20	-.21	.13	-.00	.18	.11	.23			
9.	Sympathy	3.2	.81	.01	.29*	.19	.07	-.35*	-.16	-.11	-.54**		
10.	Help	2.13	.78	-.20	.08	.13	.04	-.04	.08	.10	-.24	.27	
11.	Retaliation	1.21	.33	.28	.18	-.00	-.02	-.03	-.05	.02	.37*	-.09	-.32*

N=565 (females) N=48 staff

High scores = stable, internal, controllable, anger, violence * = $p < .05$ ** = $p < .01$

It was hypothesised that elevated staff anger would be associated with retaliation (hypothesis 4). The correlation between increased anger and retaliation for male patients approached significance (r_s=.27, p=.06). In the case of female patients, there was a significant correlation between increased anger and retaliation (r_s=.37, p<.05). Thus hypothesis 4 held for female patients only.

It was further predicted that staff anger would act as a mediator between high perceived control for patient and retaliation (hypothesis 5). This was not supported as the requirements for a mediating relationship are not all met (Baron & Kenny, 1986). These conditions are: a) the predictor (high perceived control for patient) must be significantly associated with the proposed mediator (anger), b) the predictor must be significantly associated with the dependent variable (retaliation), c) the mediator must be significantly associated with the dependent variable, and d) the impact of the predictor on the dependent variable is less after controlling for the mediator. For male patients, condition c is not met, whilst in the case of female patients, conditions a and b are not met. Therefore, in none of these cases was condition d tested.

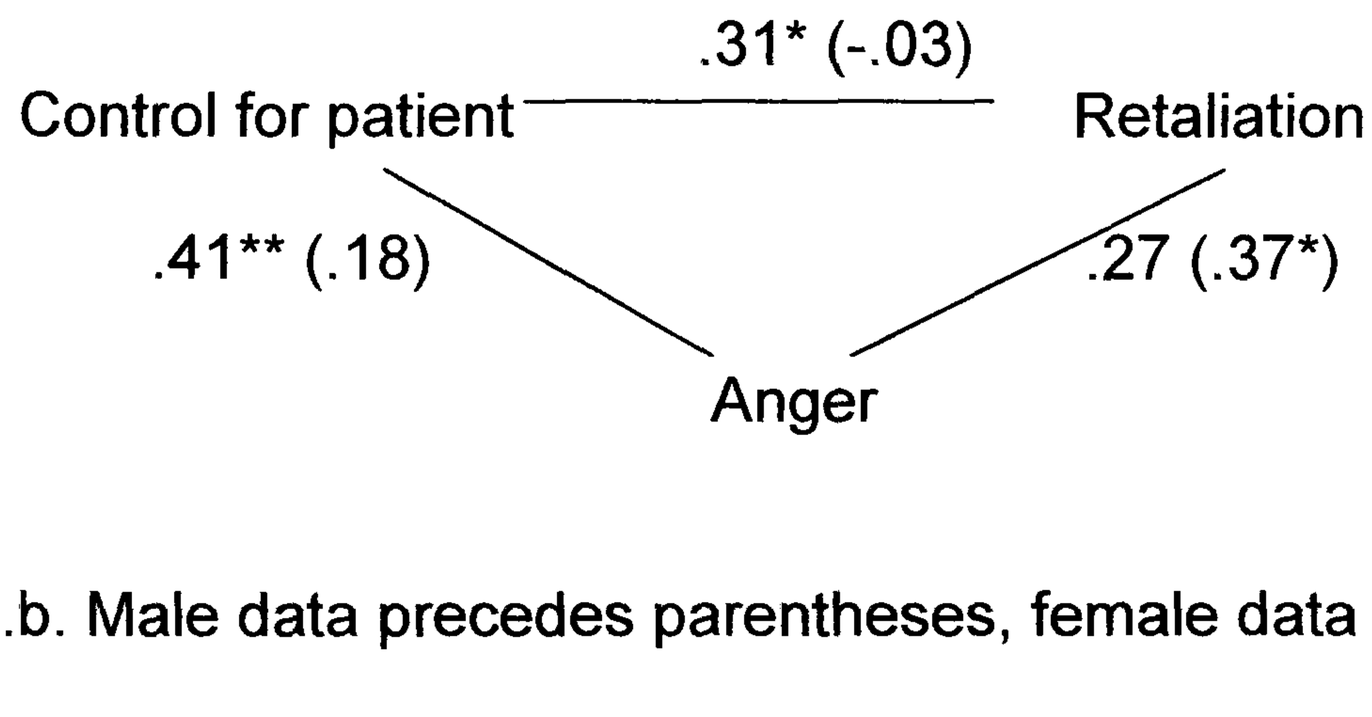
It was predicted that low perceived control for patient would be associated with high staff sympathy (hypothesis 6). This association was significant for both male (r_s=-.32, p<.05) and female patients (r_s=-.35, p<.05).

It was further predicted that increased staff sympathy would be associated with help (hypothesis 7). No association was found for male patients (r_s=.11, p=.45). However, for female patients the correlation approached significance (r_s=.27, p=.07). Thus the hypothesis was not supported, although there was a trend in the predicted direction for female patients.

The hypothesised mediating influence of sympathy between perceived low control for patient and helping (hypothesis 8) was not supported. Once again, the requirements for a mediating relationship were not all met (Baron & Kenny, 1986).

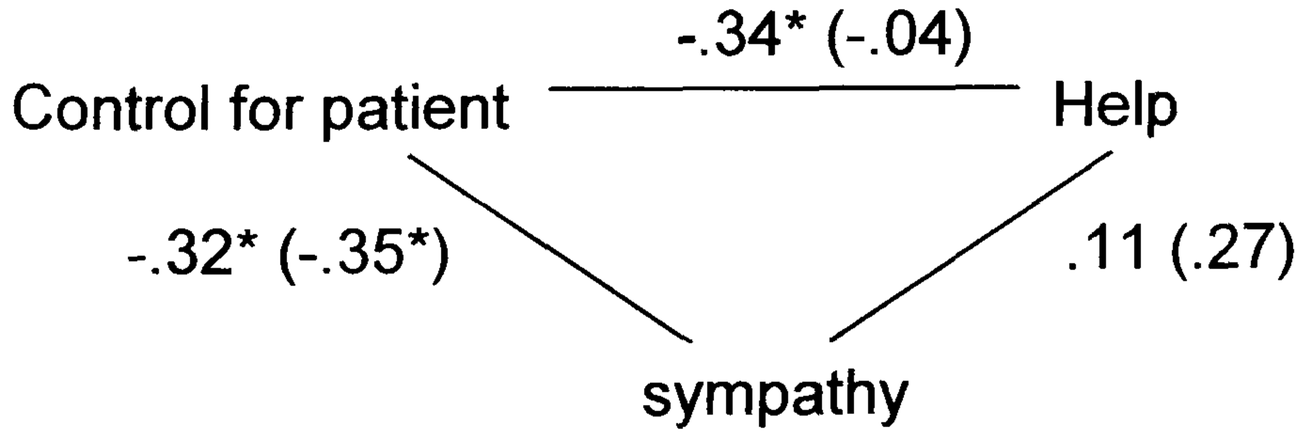
Correlation coefficients for the various relationships between perceived control for patient, anger and retaliation, and for perceived control for patient, sympathy and help for male and female patients, can be found in Figures 7.4 and 7.5.

Figure 7.4 Correlations between control, anger and retaliation for male and female patients



n.b. Male data precedes parentheses, female data in parentheses

Figure 7.5 Correlations between control, sympathy and help for male and female patients



n.b. Male data precedes parentheses, female data in parentheses

Although certain predicted associations held, overall Pathway 2 is not supported.

7.3.2 Supplementary analyses

Associations between control for staff, emotions, and behavioural responses

Associations staff attributions of control for themselves and their emotional and behavioural responses were explored. No significant associations were found for incidents involving male or female patients.

Associations between attributionals dimensions of internal-external and stable-unstable

In addition to perceptions of control for patient, the attributional dimensions internal-external for patient, and stable-unstable were also examined. For male patients, a significant positive correlation was found between perceiving causes as internal to the patient and anger (r_s=.40, p<.01), and a significant negative correlation between internal for patient and help (i.e. perceiving causes as external to the patient was associated with helping behaviour) (r_s=-.37, p<.01). For female patients, no significant correlations were found between the internal-external dimension and any emotion or behavioural response.

The stable-unstable dimension showed no correlations with emotions or behavioural responses.

For male patients, no significant correlations were found between staff experience and any of the emotion or behaviour ratings. In the case of female patients, there was found to be a relationship between staff increased experience and perceiving causes to be internal to patient

(r_s=.29, p<.05), external to staff (r_s=-.35, p<.05), and also sympathy for patient (r_s=.29, p<.05).

Simultaneous multiple regression was used to evaluate the potential role of staff age and experience as moderators of the anger-retaliation relationship. Hierarchical statistical modelling was not employed as this was not thought to be appropriate here. A hierarchical approach would have answered hypotheses concerning the best way to predict the outcome measure, whereas the aim here was to determine the extent to which the bivariate associations discovered with the preliminary correlation analysis still held when controlling for the moderating variable. In the case of age, it was found that older age of staff increased the strength of the relationship between anger and retaliation for female patients only (see Table 7.8). No such moderating relationship was found between sympathy and help. Level of staff experience (defined as years since qualifying) did not moderate these relationships either.

Table 7.8 Summary of simultaneous regression analysis predicting retaliation to female patients by staff anger with staff age as moderator

Variable	B	SE B	β	t	Sig.
Constant	-.18	.31			
Anger to patient	.29	.07	.59	4.15	.00
Staff age	.02	.01	.39	3.14	.00

It should be noted, however, that a-priori calculation of statistical power (Faul, & Erdfelder, 1992) indicates that, assuming a large effect size a

sample size of 48 is required. In this case the sample size was 44. Therefore, this finding should be treated with some caution.

In order to ensure that the nature of the stimulus situation did not differ according to patient gender, this issue was examined by carrying out a content analysis for male and female patient scenarios. A total of 49 (51%) situations involving male patients and 48 (50%) of those involving female patients, had verbal/gestural violence as the stimulus. A further 40 (41.7%) of male incidents and 35 (36.5%) of female incidents had physical violence as the stimulus. Thus 89 (92.7%) of incidents involving males and 83 (86.5%) of those involving female patients had verbal/gestural or physical violence as the precipitating stimulus. For male patients, there were seven incidents (7.3%) which fell within the 'other' category which included the patient leaving the ward without authorisation, inappropriate urination, stealing cigarettes, drinking alcohol, and making a complaint about staff, and on one occasion the stimulus situation was not clear from the interview transcript. For female patients, a total of 13 (13.5%) incidents fell within the 'other' category. On three occasions the situation involved the patient removing their clothing, two involved refusal of food, there were also individual cases of a complaint being made about staff, leaving the ward without authorisation, smearing faeces, and an issue concerning pain control in a physically ill patient. In addition, in three cases the stimulus situation was not clear from the interview transcripts. In six cases there was also the mention of self-harming behaviour also occurring. No such incidents were found for male patients. Despite these differences in the types of behaviours in the 'other' category, in general, the stimulus situations for male and female patients were comparable.

7.4 Discussion

This study set out to investigate the applicability of two pathways of an attribution-emotion-action model (Weiner, 1995) (see Figures 7.2 and 7.3)

of help-giving/retaliation to healthcare staff dealing with violent incidents. The focus was on attributions, emotions (anger and sympathy) and behaviours (retaliation and help) coded from discourse concerning actual events involving male and female patients. The study thereby addresses limitations of previous research which relies predominantly on hypothetical scenarios and patients, self-report rating scales, only focuses on helping behaviours, and does not consider potential gender issues. The study aimed to develop the previous study by attempting to replicate the gender differences found there. In summary, it was found that:

1 Pathway 1 was supported for male patients only; high perceived control for male patients was associated with retaliation ($p<.05$) (hypothesis 1), and low perceived control for male patients was associated with helping ($p<.05$) (hypothesis 2)

2 although Pathway 2 was not supported, certain predicted associations within that pathway did hold such that:

(a) in the case of male patients, high perceived control for patient was associated with anger ($p<.01$) (hypothesis 3)

(b) in the case of female patients, anger was associated with retaliation ($p<.05$) (hypothesis 4)

(c) low perceived control for patient was associated with high staff sympathy for both male ($p<.05$) and female patients ($p<.05$) (hypothesis 6)

3 for female patients only, increased staff experience (years since qualifying) was associated with perceiving causes as internal to patients ($p<.05$), external to self ($p<.05$), and sympathy for patient ($p<.05$)

4 increased staff age moderated the relationship between staff anger and retaliation for female patients ($p<.01$).

Overall, the findings from this study provide support for Pathway 1 (in the case of male patients only), but not for Pathway 2. Figures 7.6 and 7.7 illustrate the significant findings in terms of the proposed model for male and female patients for retaliation. Figures 7.8 and 7.9 illustrate the findings for help. Although relationships are supported by the findings, correlations cannot tell us about direction of causality. Therefore, it should be noted that the directions indicated in the figures are postulated (on the basis of Weiner's (1995) model) rather than proven.

Figure 7.6 Relationships for male patients: retaliation

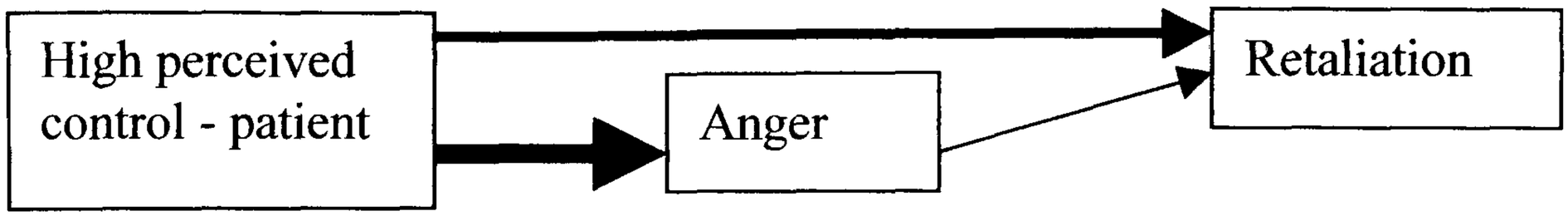


Figure 7.7 Relationships for female patients: retaliation

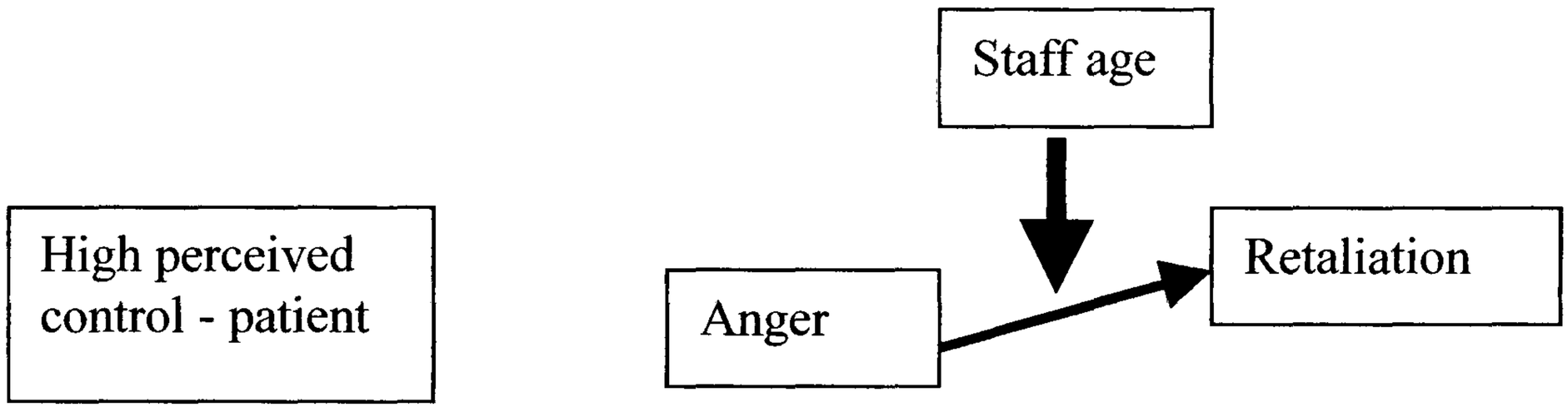


Figure 7.8 Relationships for male patients: help

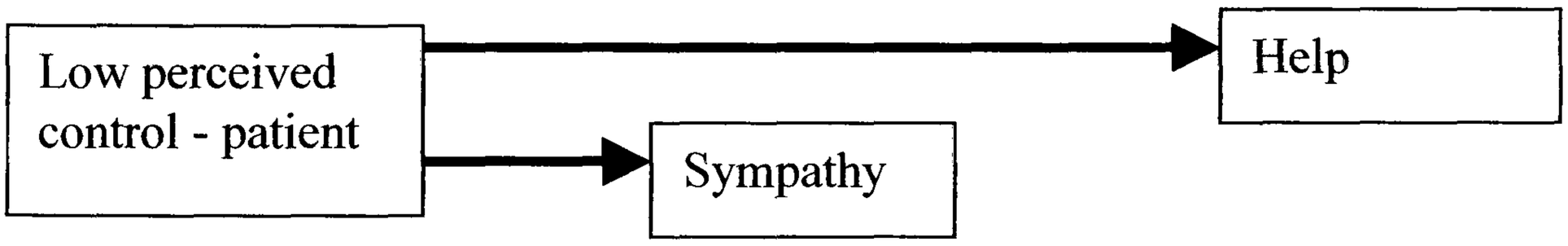
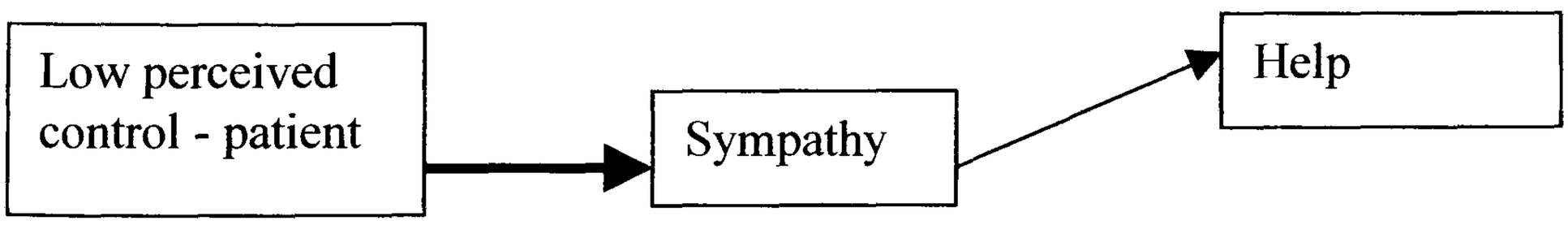
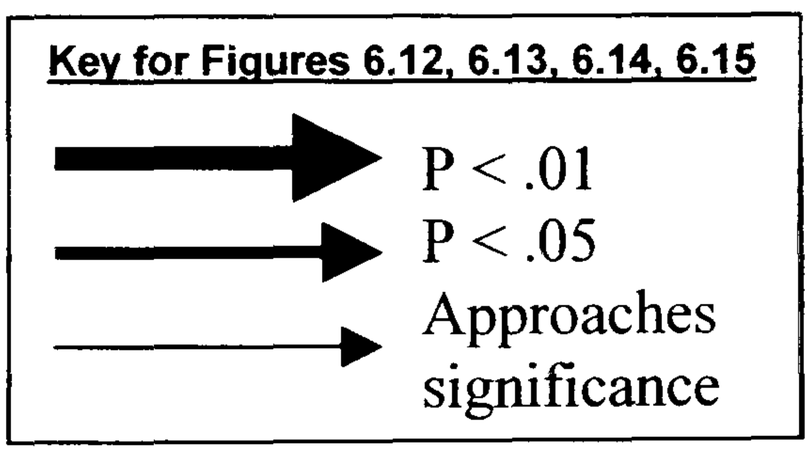


Figure 7.9 Relationships for female patients: help



n.b direction of causality is postulated



In the case of male patients, perceived patient controllability was associated independently with anger and retaliatory behaviour by staff, whilst no significant associations were found between anger and retaliation, although this relationship approached significance. Thus for male patients, the associations found support Pathway 1, and came close to those predicted for Pathway 2. It would be interesting to explore this further with a larger sample which would increase the power of the findings and reduce the possibility of a Type II error occurring. However, assuming that the lack of a significant association between anger and retaliation is not a result of such an error, this negative finding needs to be explained. One possible explanation is that healthcare staff are able to override their emotional responses to male patient violence as a result of their training and experience. This has been proposed by some researchers (e.g. Sharrock et al., 1990). The following examples taken from interview transcripts from the present study provide some support for this viewpoint:

'It was always me he seemed to target, calling me names…and if he was going to lash out at somebody it would be me he threatened to lash out at, and first of all it used to upset me when I was first on the ward…you know, newly qualified and trying to sort of make that transition from student and from being a nursing assistant here to being a staff nurse and he used to really get my back up and I could feel my personal thoughts coming in and I used to try to be as professional as I could. So I just used to ignore his taunts'.

'At the time I was angry. I let him get under my skin and as he…I mean, he was one step ahead of me but every time he went up to another level of threat I went up too and we got to the point I think if I hadn't had such long experience in these environments I think I might well have punched him, because he was pushing me and pushing me and he was doing it very carefully. So I mean he wasn't absent of blame, but it was avoidable and that's what annoyed me.'

Thus in the first instance, the nurse admits to feeling annoyed with the patient and suggests that he/she was able to override personal feelings by dealing with the situation in a professional manner. In the second instance, again the nurse admits to having adverse feelings about the patient and attributes his/her lack of violent retaliation to previous nursing experience. However, nurses may also not retaliate as a result of external controls placed on them by the situation and/or their colleagues as the following excerpt demonstrates:

> *'I admittedly lost my temper and we had a conflict situation. We were basically squaring up to each other to the extent where other staff had to intervene. We took the opportunity to move him down to the observation room, myself and a number of members of staff. If I'm honest, some of the staff were there to keep an eye on me as well as the patient. It was too personalised a situation, Nothing actually happened as such but that was because of the proximity of others. That was a control element for myself.'*

Again, the nurse in this example suggests that he/she was able to override their impulse to retaliate when angered. However, in this case it was the influence of other staff which facilitated this. It has to be acknowledged that healthcare staff employed to work with patients who may exhibit violent behaviour are in a very different situation to members of the public who may encounter violent people outside of a work context. Not only should they be trained and experienced in managing violence, but they are also in a situation where they are observed by colleagues and patients and must be seen to be acting in a professional manner if they are to remain in employment. These factors must have a significant influence on their behaviour when confronted with violence.

This ability to control retaliatory behaviour in response to anger may hold for male patients but it does not appear to operate in the case of female patients where anger was found to be significantly associated with retaliation. Neither of the proposed pathways were found to hold for

female patients. Why should this be so? If training can influence the expression of retaliatory responses to male patients, perhaps that training is not gender sensitive. In other words, the training that nurses receive about the causes of violence and the strategies to manage it may be more appropriate when considering male violence. It may be inappropriate to impose pre-conceived categories and explanations derived from research involving males only, on female violence (Worrall, 2002). Problems in understanding and dealing with the behaviour of female patients was acknowledged by some of the interviewees as the following example shows:

> *'I feel I can relate to males better perhaps than females. Maybe it's lack of familiarity of contact, but I'm often on my guard with female patients and not able to relax and perhaps think more about situations and it can be quite mentally tiring to have to watch what you say and how you act.'*

The possibility that psychiatric nursing staffs' training in the management of violence is more geared to an understanding of male violence is an interesting issue, particularly in light of the recent government publication of a strategy for the development of mental health care for women (Department of Health, 2002) which emphasises the need for gender sensitive services. The strategy acknowledges that gender is a key issue which influences an individual's experience of the world and that this is frequently not taken into account in the provision of services for women who experience mental health problems. A number of recent documents have criticised forensic mental health services for failing to provide gender sensitive services (e.g. Barnes, Davis, Guru, Lewis, & Rogers, 2002; Bartlett, 2002).

The majority of empirical studies concerning mentally disordered offenders fail to report on males and females separately (Lart, Payne,

Beaumont, Macdonald & Mistry, 1999). It has been argued that the violent behaviour of women is trivialised and deemed of insufficient importance to warrant scientific study (Moffitt et al., 2001). Furthermore, women's capacity to commit violent acts is often denied (Motz, 2001), a fact which can limit their access to, and the development of, appropriate services (Pearson, 1998).

Logan (2003) points out that current knowledge concerning assessment of risk of violence in forensic populations has been carried out almost exclusively with men and concludes that we actually know little about violence and violence risk in women. We simply do not know if the risk factors that are important in male violence are also relevant to the violent behaviour of women. In view of this, it is perhaps not surprising that the potential different needs of violent females are not dealt with in healthcare staff training programmes. Indeed, Bartlett (2002) states that research into issues concerning staff management of women in forensic healthcare settings does not seem to have been considered to be a priority despite concerns about attitudes and lack of skills to meet the established needs of women patients.

The relationship between staff anger and retaliation for female patients was found to be moderated by staff age such that the older the staff, the stronger the relationship. This could be seen within the context of the considerable changes in general views of and attitudes towards women which have occurred over the last few decades. Perhaps older staff have different underlying beliefs about women and violence than younger staff, which are difficult to override. Older staff may be more likely to view women who act in a violent way as having broken a law of nature which says that women are passive carers, not 'active aggressors' (Lloyd, 1995). It may be the case that older staff react in a more punitive manner towards violent women when they are angered because of fundamentally different underlying beliefs about the appropriate roles and behaviours of females. The use of coercive strategies may represent attempts to force

them to adopt more stereotypical gender roles. The attitudes and beliefs of staff about female violence were not investigated here. It would be interesting to examine these issues, particularly for different age groups of staff.

The lack of associations found between high perceived control for patient and both anger and retaliation for female patients also requires consideration here. In the previous study it was noted that staff appeared to have some difficulty explaining female violence. In that study, although staff did make attributions for female patient violence, they explicitly stated in the restraint documentation that they found this process problematic. This is consistent with previous research which has found that staff are poorer at predicting risk of violence of female patients (Gudjonsson et al., 2000; Lidz et al., 1993; Monahan et al., 2001), and explain causes of violence differently according to gender of offenders (Horn & Hollin, 1997). As in the previous study, in this study, staff did make attributions about the causes of violent behaviour involving female patients but, contrary to prediction, these were not associated with anger or retaliation. Perhaps they are voicing a variety of potential explanations for the violence of female patients but have less conviction about the relevance of these than when explaining male violence. The level of certainty about explanations is not something which was addressed in the present study.

When considering the relationships between low perceived control for patient, sympathy, and help, it can be seen that these are not as predicted by the Pathway 2 for either male or female patients. In the case of male patients, low perceived control for patient was significantly associated with both sympathy and help, but no significant association was found between sympathy and help (see Figure 7.9). In the case of female patients, the association between low perceived control and sympathy was significant, that between sympathy and help approached significance, whilst that between low perceived control for patient and

help was not significant (see Figure 7.10). Thus, for male patients, the results are comparable for high perceived control for patient, anger, and retaliation, and low perceived control for patient, sympathy, and help. Although in neither case do the results exactly fit Weiner's (1995) model, the findings are somewhat consistent and indicate that similar processes may be operating for both helping and retaliation. This is consistent with Weiner's view that these opposing behaviours can be explained by a single model of social motivation. In the case of female patients however, a different picture emerges.

The fact that, in the case of female patients only, increased staff experience was associated with viewing behaviours as internal to patients, external to themselves, and sympathy for patients, suggests that staff's understanding of female violence is altered through working with this patient group. This may be because their experience contradicts their expectations in the case of female patients. Again, this may indicate that staff training in the management of violence is not gender sensitive.

Another possible explanation for the gender differences found is that there are fundamental differences in the nature of the situations involving male and female patients. Research has found a number of ways in which male and female patients in secure psychiatric settings differ. Thus, women are more likely to have been transferred from other NHS facilities; to have a history of fire setting or criminal damage, but less likely to have committed a violent or sexual offence; have a history of abuse and/or self-harm; have physical ill health; be admitted after behaviours for which they were not charged or convicted and be detained under civil sections of the Mental Health Act; and to have a diagnosis of personality disorder, particularly borderline personality disorder (Department of Health, 2002). Monahan et al. (2001) found that female psychiatric patients in their study were equally likely to be violent as male patients on discharge from hospital. However, the nature of the violence

differed in that males were more likely to commit more serious acts of violence and the targets of that violence differed according to gender; females being more likely to be violent towards family members. Such findings suggest that the characteristics of male and female patients may be quite different and these could well influence the nature of the conflict situations in which they are involved. In order to explore this possibility, a content analysis of the transcripts was carried out which revealed that the stimulus situations described for male and female patients were broadly similar. When considering the types of situations which were not categorised as either verbal/gestural or physical violence, some differences were noted, however. In addition, self injury was more likely to be a feature of the situation for female than for male patients. A more systematic evaluation of the role of the stimulus situation is recommended for future research.

The indication that male and female patient violence did not differ significantly in terms of either nature or severity in this study can be seen as consistent with female patients' own perceptions that, despite behaving in a similar manner to male patients, they are treated differently as illustrated by the following quotation:

> *'Men get away with it. If women do something, they get a harder time'.*
>
> (Parry-Crooke, Oliver & Newton, 2000).

The possibility that there could be a gender interaction effect is something which has been addressed in previous literature focusing on staff's assessment of risk of violence of male and female patients, with female staff being more likely than male staff to underestimate the risk of violence of female patients (Elbogen et al., 2001). In this study no differences were found between male and female staff's attributions, emotions or behavioural responses for male and female patients. One possible explanation for this finding is that actual staff gender was

examined rather than sex-role type. Murphy and Brown (2001) found that sex role type was associated with different attitudes to male and female offenders, rather than actual sex of the staff member. Thus male and female staff who had feminine sex role type expressed harsher attitudes towards female offenders than those with other sex role types. It may therefore be more appropriate to look at the impact of sex role type than sex of staff per se.

This study highlights a number of problems which can arise when conducting research in clinical settings. One such difficulty is obtaining a large enough sample to meaningfully analyse the data. The setting in which this research took place was an average sized medium secure facility yet the number of qualified nursing staff at the unit was not sufficient to conduct a study which assumed a small effect size. This has implications for the power of the findings reported here. In order to increase the number of the participants, unqualified staff could also have been included. However, the effects of such factors as level of training would have to be considered when using a more heterogeneous sample. Another solution would be to include staff in other facilities.

The extent to which the findings can be generalised to other similar settings is unknown, since a range of factors specific to the organisation studied may have influenced the results. The organisational culture may be reflected in the attributions and behaviours of the nursing staff, for example. There is also a wider generalisability issue; how far do these findings apply to other professional groups who deal with violent clientele as part of their jobs?

In this study, an examination of the eliciting situations was made. Although these appeared comparable for male and female patients, the events in question were not held constant. They were incidents which had actually happened to the staff concerned and were selected by them.

It cannot be ruled out that aspects of the stimulus situation influenced the attributions, emotions, and behaviours of staff.

7.5 Conclusions

This study raises a number of important questions. These concern firstly, the extent to these findings would be replicated if objective data concerning staff behaviour were examined; secondly, the generalisability of the findings across professional groups; thirdly, the potential influence of the nature of the eliciting stimulus situation. The next study aims to address these issues by using objective measures of staff behaviour, examining a different professional group at high risk of encountering violence in the workplace, and by holding the stimulus situation constant.

CHAPTER EIGHT

Study 3: Firearms Officers' Attributions concerning Shoot-Don't Shoot Training Scenarios and Performance Outcomes

8.1 Introduction

Weiner's (1995) attribution-emotion-behaviour model predicts that where staff perceive the causes of violent situations involving clients as highly controllable by the client, they will be more likely to feel angry and this in turn will lead to increased likelihood of retaliatory responses. Similarly, Weiner's model predicts that perceiving clients to have a low level of control over the causes of violent situations will be associated with sympathy, which in turn will lead to helping behaviour. Weaker direct relationships are predicted between attributions of control and behavioural outcomes, such that high perceived control for client is associated with retaliation, whilst low perceived control for patient is associated with helping. Results from the previous two studies suggest that this model cannot fully explain psychiatric nursing staff management of violence involving patients. A consistent finding in the two studies, however, is a significant association between perceptions of high control for patient and punitive/retaliatory responding, in the case of male patients only. Whether this finding is applicable to other professional groups who deal with violence in their work is not clear.

This study examines a different professional group to that focused on in the previous studies; police firearms officers. The rationale for investigating this group here requires some explanation. There is little, if any, research which directly examines the attributions of such officers or the links between officer attributions and behaviour in work settings. Although the applicability of the model proposed in this thesis to this area is not known, it has been suggested that the attributions police officers make about suspects may have important implications for the way they deal with them (Ainsworth, 2002). Indirect evidence that this may be the case comes from research which looks at reasons why not all police officers demonstrate the same conflict resolution abilities, despite having had comparable training in the de-escalation and management of violence. Toch (1996) for example, examined the development of violent

incidents in men convicted of violent offences and claimed that certain police officers are 'violence-prone' (Toch, 1992). The study included interviews with the offenders and examination of documentation produced immediately after an arrest was made. As well as studying violent offenders, 32 police officers who had been assaulted also participated in the study. These officers had either been assaulted by one of the interviewed assaulters (N=14) or been repeatedly assaulted (on at least three recent occasions).

In his analysis of the data collected, Toch (1992) contends that the degeneration of an incident between police officer and suspect can by traced to 'psychological dispositions and motives' (p.58) which are present prior to the incident, in either or both parties. Such factors, he argues, can lead to an otherwise innocuous interaction becoming explosive. Certain dispositional traits (such as emotional instability) are argued to be evoked by a situation (e.g. one that irritates the officer) and this produces an emotional state (e.g. anger) which leads to over-reaction (Toch, 1996). Toch claims that certain officers pre-categorise incidents drawing hasty conclusions based on 'cursory reviews of selectively garnered data' (p.109). The violence-prone police officer can invite or promote conflicts with citizens; the dispositions these people bring to their work can contaminate their relationships with suspects and exacerbate conflict. Implicit in Toch's research is the notion that the way an individual interprets a situation (i.e. to what he or she attributes an outcome), influences emotions which in turn influence behaviour. This makes his work very relevant to the present investigation in that Toch's analysis would appear to be in keeping with the model proposed here.

In a more recent study (Barton, Vrij & Bull, 2002) looked at factors associated with increased likelihood of firearms officers shooting in training scenarios. Again, they did not examine attributions specifically. In their research they examined the questions 38 officers asked of a firearms instructor whilst on a 15 minute car journey to a simulated

incident. Each officer encountered two incidents; one was an incident where it would be deemed justifiable for the officer to shoot and the other where it would be difficult to justify shooting. The questions asked were tape recorded, transcribed and subsequently categorised into five separate categories: suspect details, support available, nature of location, suspect's weapon, and strategy for resolution.

The most frequently requested information concerned the suspect (e.g. location, movements and description). All officers shot the suspect in the easy to justify situation. In the difficult to justify situation, almost half of the officers also shot (47%). Barton et al.'s (2002) analysis revealed that requesting more information about the suspect's weapon was associated with shooting inappropriately. The authors tentatively concluded that asking about the weapon was associated with having a preconceived idea before arriving at the scene that the suspect would exhibit threatening behaviour when confronted.

In order to explore the results further, Barton et al. (2002) carried out a second study in which they asked 65 different officers to examine the transcripts and state how they thought the incident would be resolved. They found that the more questions asked about the weapon in the transcript was associated with officers stating that they thought that the suspect would shoot the officers when challenged. The researchers conclude that there could be a causal relationship between asking questions and the perception of threat posed by the suspect. However, the question remains: what leads officers to focus their questions in such a way in the first place? Although the researchers suggest that asking questions in itself influences the perception of threat, it is possible that the reverse sequence is true; that the questioning reflects the individual's perceptions. This would be more consistent with the model presented in this thesis. Some support for this comes from a study conducted by MacDonald, Kaminski, Alpert and Tennebaum (2001) who propose the 'danger-perception theory' to explain patterns of police shooting. They

suggest that officers are more likely to use deadly force in circumstances where they encounter greater levels of violence or view their job as particularly hazardous. In order to test this 'ratio-threat' theory, they analysed shootings which occurred between 1976 and 1996. They found that there was a stronger link between level of objective threat and police shootings in cases of killings of civilians and robbery-related homicide rather than 'love triangle' killings. This suggests that police shootings cannot be accounted for purely by level of threat in a situation, but that the individual officers' perceptions of the situation are playing a role, since the nature of the situation appeared to influence whether or not the officer shot.

The research thus far suggests that the meaning, or explanation, an officer gives to a situation can influence his/her management of the incident. The Police Complaints Authority (PCA) review of firearms incidents from 1998-2001 (PCA, 2003) acknowledges the importance of considering individual differences in officers involved in shootings. They recommend that an assessment of the decision making process in relation to incidents as well a background officer characteristics, attitudes to the use of firearms, and experience should be the subject of further research in this area.

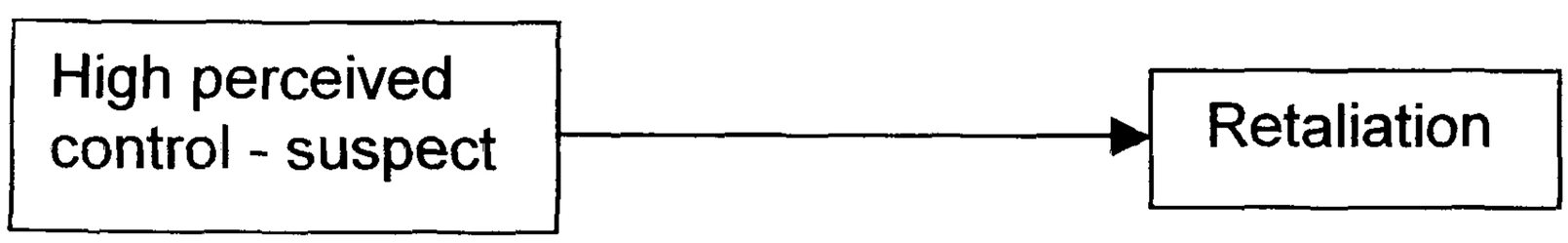
The issue concerning the extent to which findings from the two previous studies in this thesis can be generalised to other professional groups is addressed here by focusing on police firearms officers. This study also seeks to develop the previous research by investigating objective measures of staff responses in violent interchanges. In the previous study, staff behaviour was measured purely through self report of the staff themselves, no objective information concerning staff's actual behaviour when involved in a violent situation with patients was obtained. Staff descriptions of what they did in violent confrontations could be prone to distortion for a variety of reasons such as wishing to present themselves as efficient and professional. The present study aims to tackle this

methodological difficulty by using objective behavioural data in the form of performance ratings of instructors and computer generated accuracy data.

The extent to which the attributions extracted and coded in the previous study reflect an 'attributional style' of the participant is an issue which was not addressed. In other words, the extent to which these attributions represent a general and persistent way of attributing negative events is not known. In the present study two methods of measuring attributions are used; the LACS is used to code attributions from transcribed interviews, and an adaptation of the ASQ is used to examine general tendencies to make certain types of attributions for negative events in the workplace.

This study focuses on the attribution-behaviour association which was found to be strong when considering retaliatory behaviours of staff dealing with violent incidents with male patients (referred to as Pathway 1 in the previous study). Figure 8.1 shows the pathway under investigation. In this study, behavioural responses are observed and recorded by trainers, rather than being self-report as in the previous studies in this thesis.

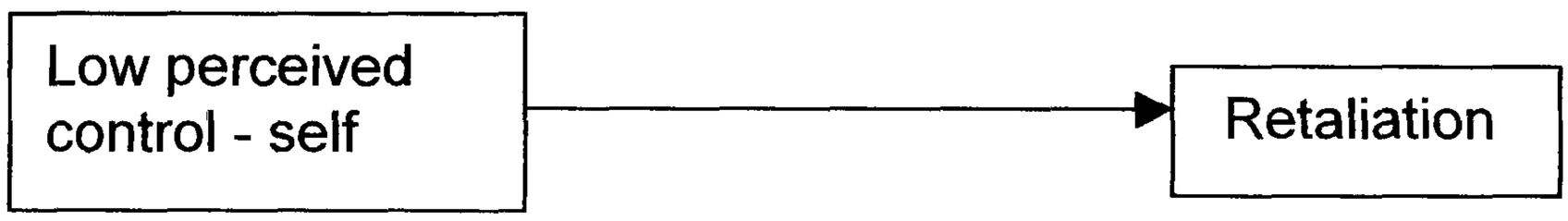
Figure 8.1 Pathway 1 as applied to police firearms officers dealing with shoot-don't shoot training scenarios



Although it was predicted in the previous two studies that perceptions of low control for self would be significantly associated with retaliation in the case of nursing staff dealing with violence involving patients, this was not

in fact found. A possible explanation for this finding is that the training and the carer role of the staff acted to minimise this effect. However, in the case of police officers confronted with suspects in shoot-don't shoot scenarios, where they are place in the position of having to decide whether or not to shoot, it seems plausible that feeling unable to control the causes of the situation would be associated with increased likelihood of a retaliatory response. Therefore, this relationship (illustrated in Figure 8.2) is tested here.

Figure 8.2 Proposed association between low perceived control for self and retaliation

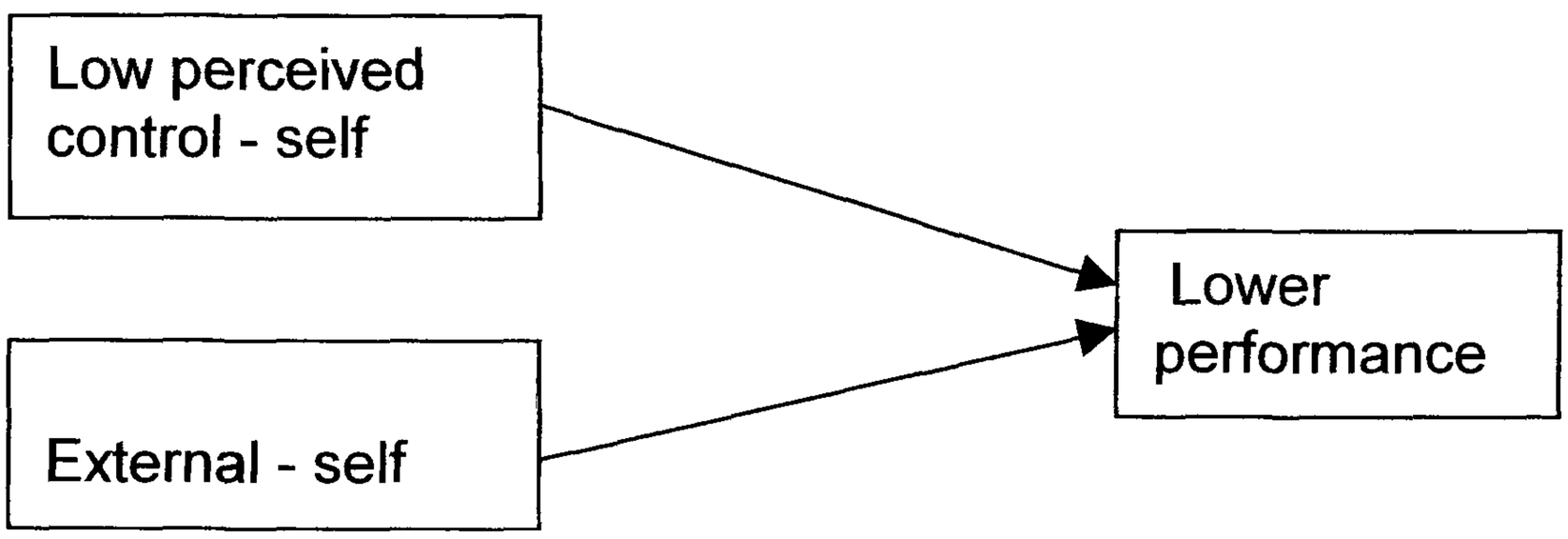


This study also aims to apply Weiner's (1995) model more broadly. Weiner (1979) has suggested that attributions of control for self can predict work performance. He claimed, for example, that sales personnel who perceive success as uncontrollable (and external) to themselves are less likely to make sales as they will be less proactive, believing that they are unable to influence the outcome of a sales interaction. Silvester, Patterson and Ferguson (2003) argue that attributions, in addition, may be an important factor in staffs' customer relations abilities. The researchers interviewed ten good, ten average, and ten poor sales assistants, nominated as such by store managers. The assistants were required to explain why they thought particular customer related work situations had gone well or badly. Interviews were audiotaped, transcribed and then coded using the Leeds Attributional Coding System (LACS) (Munton et al., 1999). In addition, staff completed a

questionnaire designed for the study which included items concerning customer care and sales performance items.

Consistent with Weiner (1979), it was found that internal-controllable attributions for positive and negative job-related outcomes were significantly associated with better performance in terms of sales behaviour and customer care, as rated by managers. This suggests that attributions may be associated not only with retaliatory behaviours in the workplace, but also with performance more generally. Figure 8.3 shows the predicted relationships between perceived control for self, internal-external for self, and performance.

Figure 8.3 Proposed association between low perceived control for self, external for self, and general performance



The study aims to test the association between attributions of control and retaliation in more detail by: holding the stimulus situation constant, including scenarios only involving male clients, and by using objective measures of staff behaviour. In addition, the study considers a different professional group at high risk of encountering violence in the workplace; police firearms officers.

The following hypotheses were tested:

1 firearms officers who make more internal and controllable attributions for suspect over the causes of incidents will:
   (a) shoot more frequently
   (b) shoot less accurately
   (c) receive lower general competency ratings

2 firearms officers who make more external and uncontrollable attributions for self over the causes of incidents will:
   (a) shoot more frequently
   (b) shoot less accurately
   (c) receive lower general competency ratings

In addition, associations between codings of the attributional dimensions on the LACS and the ASQ (for negative events) of stable-unstable, controllable-uncontrollable for staff, internal-external for staff, were explored.

8.2 Method

8.2.1 Context and participants

The study was carried out with a United Kingdom Police Firearms Division. A total of 1250 police officers are employed by the police force in question and 60 of these are current operational Firearms Officers (male: N=57 (95%); female: N=3 (5%). A total of 54 male Firearms Officers undergoing refresher training participated in the study. The mean age of the officers was 35 (SD 4.38, range 25-45). The mean time served in the police force was 12 years (SD 6.22, range of 3-26). The mean time served as a Firearms Officer was 5 years (SD 4.1) with a range of 0-16 years.

Training in the use of firearms comprises an initial three week course which teaches marksmanship skills as well as the tactical and interpersonal skills to support these. Three times per year, each firearms officer must requalify in marksmanship and is assessed on tactical skills. As well as training on a firing range, officers now undergo simulation assessment and training. This is an untaught event in which sufficient information is provided to allow the participants to experience as realistic a situation as possible in a simulated learning environment. Interactive firearms simulation training requires the participant to practice skills within stressful situations in order to prepare them for actual situations which may occur in their work setting. They are faced with scenarios in which they have to make a variety of decisions including: whether or not to shoot, which suspect poses the most threat where there are multiple suspects, and how to minimise risk to innocent civilians whilst working within the law. The simulated scenarios enable them to make 'mistakes' within a safe and controlled environment and give them the opportunity to critically analyse their own reactions.

Simulation training can take a number of forms one of which is the use of interactive CD's known as CineTronic^{TM} , a firearms simulation training system. In such training, a film is projected onto a wall in a room. Pairs of officers are briefed about the incident and they have to decide how to react. They are armed with real guns but these are fitted with lasers rather than ammunition. Objective data concerning the number of shots fired and the accuracy of these is obtained from the CineTronic^{TM} computer programme. The system is interactive such that the officers' shooting behaviour influences the outcome of the scenario. Thus the general scenario is constant but the outcome varies dependent on the behaviour of the officers during the incident.

8.2.2 Procedure

The research protocol was first formally agreed by the Firearms Division, Chief Superintendent, and Deputy Chief Constable. The officers due for refresher training (the sample used in this study, N=54) were verbally briefed about the research by the Firearms Instructors (see Appendix VII). None of the officers refused to participate, thus all of the trainees were included in the study.

Attributional Style Questionnaire: An adaptation of the Attributional Style Questionnaire (Peterson et al., 1982, Peterson & Villanova, 1988) (Appendix VIII) was administered prior to the training scenarios. This was adapted specifically for the present study. Each participant was required to identify eight incidents which they had experienced at work. Four of these were positive e.g. 'Please think of a recent incident at work which made you feel good', and four negative e.g. 'Please think of a situation that you were involved in at work which you felt was unsuccessful'. They were then required to identify the main cause of the incident and to rate the cause along four attributional dimensions: internal/external (i.e. to what extent the cause was due to himself or other people/circumstances), stable/unstable (i.e. to what extent the cause was likely to influence similar future events), global/specific (i.e. to what extent the cause was likely to influence a wide range of work events or areas of his life), and controllable/uncontrollable (i.e. to what extent he had control over the cause). Each of these was rated on a seven point Likert scale. It should be noted that the officers were not specifically asked to think of examples relating to firearms situations.

For analysis purposes, each participant was given a mean score for each dimension across the four negative experiences. Data from the positive experiences was not used in the subsequent analysis.

CineTronic™ Scenarios: Pairs of officers participated in a sequence of four realistic simulated scenarios using CineTronic™. These are used across forces in England and Wales. The four situations are representative of the types of incidents that firearms officers are called to. The officers are provided with limited information about the scene they are to attend. The interactive scenario then commences. In one scenario for example, the trainees are told the following:

> *'A taxi driver has reported dropping off a fare approximately two minutes previously. As the male got out of the back of the car, a handgun fell out onto the floor from inside his jacket. He picked it up and placed it back underneath his jacket (left side of jacket). He paid the driver and then walked off towards the pubs and clubs. The taxi driver describes the weapon as being a black coloured automatic pistol, not a revolver. The gun certainly looked real and sounded metallic as it hit the floor. The man was a white male, aged approximately 30 years, around 5'9" tall, medium build, with short dark hair with long side burns and a neatly trimmed 'goaty' beard. He was wearing a dark waist length jacket with white chino jeans'.*

The officers are then told that they have authority to covertly arm and search the area and that they are to make their way to the area. The CineTronic™ scenario then ensues in which an individual stops, turns, confronts the officers as to why they are following him. He pulls a handgun from inside his jacket. However, upon challenge he puts the gun on the ground and gives up. All officers participated in the same scenarios. Because of technical difficulties, on one occasion, another set of scenarios was used for one pair of officers. However, inspection of their results did not suggest them to be outliers, therefore they were included with the total sample.

Debriefing Interviews: Pairs of officers were debriefed following each scenario using the same questions and protocol, by two Firearms Instructors (see Appendix IX). This focuses on four areas: 1) how

successful the participants perceived the incident went and why they thought it had ended as it had done, 2) their observational skills and recollection of aspects of the incident, 3) their knowledge of the relevant laws, policies and procedures, and 4) the extent to which they had worked within these. This is the basic format to the debriefing interviews which ordinarily take place following the CineTronic™ scenarios and was not specifically designed for this study. One firearms instructor took the lead role in the interview with the other asking additional questions to elicit further details where necessary. The debrief interviews were recorded on audiotape for analysis. They were then transcribed and coded using the Leeds Attributional Coding System (LACS) (Stratton et al., 1988).

In line with the LACS manual instructions, attributions were initially extracted from the transcripts. The cause and outcome of each attribution were identified. An example of a passage of text with identified attributions can be found in Figure 8.4. In this example, the first outcome is the event going badly. The cause of this is the speaker calling a 'strike' (issuing of a warning prior to shooting) too late. Once attributions had been identified in this way, they were each coded along the following dimensions: Stable-Unstable, Global-Specific, Internal-External and Controllable-Uncontrollable. As in previous studies, three possible codings were used. Using the Stable-Unstable dimension as an example, Unstable was rated '1', neither Stable nor Unstable was rated '2' and Stable was rated '3'. Table 8.1 provides brief descriptions of the LACS dimensions with examples from the firearms' officers interviews in this study. A total of 10% of all attributions (N = 137) were coded by a second coder for the purposes of evaluating inter-rater reliability (see Table 8.1 for definitions and reliability data). Acceptable inter-rater reliability was found for all of the dimensions with the exception of global-specific (kappa = .2). This dimension was thus excluded from further analysis. Difficulty in gaining acceptable levels of reliability for the Global-Specific dimension has been found in other studies (e.g. Brewin et al.,

1991). The reasons for this are unclear but it is an area which warrants further consideration given the potential theoretical importance of the finding.

Attributions were also coded according to topic; all those concerning how the incident went generally were coded '1', and all those concerning shooting were coded '2'. The example in Figure 8.4 would be coded '1' as the passage of text concerns how the incident went. An example of a passage of text which would be coded '2' can be found in Figure 8.5.

A mean score was obtained on each dimension for all attributions, those concerning the incident generally, and those concerning shooting behaviour following the convention adopted in the previous study. A mean score was calculated in order to overcome variability in numbers of attributions produced by police officers.

Figure 8.4 Example of LACS extractions in passage of text

Instructor: How do you think that went?

Interviewee: */Very bad.*

Instructor: (Why do you think it went that way?)

Interviewee: *I called a strike too late. /I think the problem we had is that of a lack of communication. Because initially I was meant to speak on the radio and [colleague] was speaking on the radio…but obviously trying.. when I see the car pull up, I could see two men, one in the back. Passing the message on…then the next thing I knew they were out and the shot gun's gone off before we've even reacted. /I didn't call a strike there; I didn't react in my brain. It wasn't until such time as they got out and shot that it stuck in my head…a shoot…a strike…but they weren't actually going to be coming back to the bank. Whether or not they've seen us at all or whatever. So my point of view is a strike should gave been called earlier.*

Figure 8.5 Example of passage of text coded for topic '2', shooting behaviour

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Instructor: Was it reasonable to fire at that particular moment when you discharged your shot and pulled the shot deliberately?

Interviewee: *And pulled the shot? That was a split second reaction. I can honestly remember doing it. If I had the choice I wouldn't …If I'd had the choice If I could go through that again, that second shot I don't think I would have liked to have taken that. It was a split second reaction. The first shot I was happy with. The second shot, in hindsight, not.*

Table 8.1 Descriptions of the LACS dimensions with examples

Brief Description	Examples
Stable-Unstable: causes are coded 'Stable' (3) if they are long-lasting and have an on-going influence upon outcomes. Causes coded 'Unstable' (1) are more temporary (k = .98)*	*It was obvious that you can't speak and cover at the same time so we swapped roles* (Stable) *The end result was that the man got shot, because he, in my view, was threatening the life of the chap he was arguing with* (Unstable)
Internal-External (Suspect): refers to the locus of the cause. An 'Internal' (3) cause originates in the patient (i.e. behaviour or personality) an 'External' (1) cause includes the situation or behaviour others (k =0.71)*	*I felt on edge, he was a threatening type of man* (Internal to suspect) *It was a difficult situation because there were public in the vicinity* (External to suspect)
Internal-External (Officer): again refers to the locus of the cause, but this time originating within or outside of the speaker (k = 0.82)*	*I couldn't see if he was sighting the weapon at us, I was trying to do two things at once* (Internal) *Given the circumstances I didn't lower the weapon* (External)

Controllable-Uncontrollable (Suspect): a cause is coded 'Controllable' (3) if the speaker indicates that the patient would have been able to influence the cause of an outcome. A cause is coded 'Uncontrollable' (1) if the speaker indicates that it is beyond the influence of the patient (k = 0.71)*	*I don't think it was the ideal situation, I mean it was forced by them* (Controllable by suspect) *I didn't fire because I was too slow* (Uncontrollable by suspect)
Controllable-Uncontrollable (Officer): refers to controllability of the cause to the speaker themselves (k = 0.62)*.	*I believe obviously that the confrontation was caused by myself moving forward and that is why I backed off* (Controllable by officer) *I felt there was very little we could do about it at that particular point as we had no inclination that a weapon of any sort was going to be used* (Uncontrollable by officer)

*Kappa scores are based on a total of 10% of all attributions (N=137) coded independently by the researcher and a trained LACS rater.

Competency Ratings: Following each debriefing, an experienced Firearms Instructor rated each officer on a range of procedural and interpersonal competencies using a three point Likert scale (see Appendix X). The procedural competencies rated were: the extent to which the officer took appropriate cover, worked within the law, adhered to standard procedures, and made appropriate decisions. The interpersonal competencies rated were: communication skills and teamwork skills. A total of 34 (63%) of the sample were also rated independently by another Firearms Instructor who also observed the participant's performance in the scenarios. As inter-rater reliability for the competency of working within the law was rather low ($\alpha = .49$), this was excluded from the analysis. As the remaining competencies were all significantly correlated with each other (see Table 8.2), an overall mean competency score was calculated from all of these, and this was used for the analysis.

Objective Ratings: Shooting accuracy was considered separately. This particular competency was based on both the computer output (since objective data concerning distance of the actual shot from the suspect was calculated automatically) and the instructors' judgement about accuracy given the location of the officer in relation to the scenario, obstructions and so on. The instructor also recorded how many times the individual officer shot.

Table 8.2 Correlations between competencies

Competency	Mean	SD	1	2	3	4	5
1. Communication (α = .66)	3.17	.69					
2. Teamwork (α = .76)	3.22	.74	.74**				
3. Cover (α = .72)	3.46	.69	.50**	.56**			
4. Adherence procedures (α = .71)	3.41	.69	.80**	.71**	.53**		
5. Decision making (α = .75)	3.33	.78	.76**	.89**	.56**	.80**	
6. Shooting Accuracy (α = .74)	3.22	1.09	.74**	.58**	.40*	.65**	.50**

N = 54 police officers * p < .05 ** p < .01

Analysis: Spearman's Correlations were used to investigate the relationship between attributions and behaviours. Assuming a large effect size, the minimum sample size was calculated to be 42 (Faul & Erdfelder,1992).

8.3 Results

A total of 1365 attributions were extracted from the interview transcripts of the 54 firearms officers. The mean number of attributions made per officer for the four scenarios was 25.5 (SD = 14.9), with a range of 6–68, and a median of 21. The number of attributions made was significantly negatively correlated with years in the police force (r_s = -.27, p < .05), thus the more years experience the officer had, the less attributions that officer made. No significant correlations were found between number of attributions made and years as a firearms officer or age of the officer.

8.3.1 Tests of hypotheses

Correlations between ASQ scores, LACS dimensions, overall competency, and shooting behaviour can be found in Table 8.3.

Associations between perceived control for suspect and shooting frequency, general competency, and shooting accuracy

It was hypothesised that officers who perceived causes of outcomes as controllable by the suspect would shoot more frequently than those who perceived causes as uncontrollable for suspect (hypothesis 1(a)). The association between perceived control for suspect (as measured by the LACS) and mean number of shots fired per scenario approached significance (r_s = .26, p = .06). However, when attributions for shooting behaviour were considered separately i.e. attributions made in passages of text following specific questions concerning why they did or did not shoot, the association between perceived control for suspect and number of shots fired reached significance (r_s = .29, p < .05). Thus this hypothesis is partially supported.

Contrary to expectation, attributing control to suspect was not associated with lower general competence scores (r_s = -.06, p = .64) (hypothesis 1(b)), or poorer shooting accuracy (r_s = -.17, p = .23) (hypothesis 1(c)).

Associations between perceived control for officer, shooting frequency, general competency, and shooting accuracy

It was hypothesised that low perceived control for officer would be associated with increased shooting frequency (hypothesis 2 (a)). However, control for self (as measured by the LACS) was not found to be significantly associated with number of shots fired (r_s = -.20, p = .14), although the correlation is in the predicted direction. Control for self was not found to be significantly associated with overall competence (r_s = .15, p = .27) (hypothesis 2(b)), or shooting accuracy (r_s = .14, p = .32) (hypothesis 2(c)). Making external attributions for self also was not

significantly associated with overall competence (r_s = .04, p = .79) [hypothesis 3(a), or shooting accuracy (r_s = .05, p = .72) (hypothesis 3(b)). There were no significant findings when the data for attributions concerning shooting behaviour were considered separately.

In terms of ASQ scores, no significant correlations were found between perceived control for officer and general competency, frequency of shooting, or shooting accuracy. However, the association between control for self and shooting frequency was in the predicted direction.

Table 8.3 Correlations for LACS dimensions, ASQ negative scores, overall competence and shooting behaviour

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age of Officer	35.13	4.38														
2. Firearms Experience	5.44	4.10	.49**													
3. Police Experience	12.02	6.22	.53**	.83**												
4. Total Attributions	25.52	14.87	-.16	-.22	-.27*											
ASQ (negative events)																
5. Stable	3.5	1.39	-.13	-.24	-.10	-.12										
6. Internal	5.60	1.30	.19	.17	.21	-.15	.07									
7. Control	5.12	1.13	.06	.07	.13	.16	.34*	.55**								
LACS																
8. Stable	1.03	.09	-.07	-.07	.03	.28*	-.25	.19	-.21							
9. Internal-Officer	1.57	.26	.04	.06	.06	-.13	-.12	-.01	.09	.13						
10. Control-Officer	1.51	.26	.08	.11	.07	-.25	.01	-.16	.18	-.01	.89**					
11. Internal-Suspect	1.77	.31	.03	-.04	.01	-.27*	.14	-.04	.10	-.17	-.45**	-.27*				
12. Control-Suspect	1.82	.30	.06	.02	.03	-.08	-.06	-.11	.05	-.12	-.35**	-.32*	.78**			
Competencies																
13. Overall Competence	2.43	.47	.37**	.47**	.50**	-.39**	.13	-.17	.20	-.04	.04	.15	.07	-.06		
14. Shots Fired	.76	.50	.15	.18	-.17	-.09	.35*	-.08	.19	-.14	-.12	-.20	.32*	.26	.15	
15. Shooting Accuracy	3.34	.77	.16	.18	.18	-.14	-.04	.21	-.28*	.09	.05	.14	-.08	-.17	.67**	-.18

N=1365 N=54 officers High scores = stable, internal, controllable, competent * = $p < .05$ ** = $p < .01$

8.3.2 Supplementary analyses

Exploration of associations between LACS and ASQ codings

Associations between LACS coded attributions and ASQ scores for the dimensions of stable-unstable, controllable-uncontrollable (for self), and internal-external (for self) were explored. Table 8.3 shows the relevant correlations. As the global-specific dimension of the LACS could not be coded reliably, this dimension was excluded from the analyses. It can be seen that no significant correlations were found between LACS codings and ASQ scores. The stable-unstable dimension correlation approached significance (r_s = -.26, p = .06), note that this is a negative correlation. However, it can be seen from Table 8.3 that the mean scores and standard deviation for the stable-unstable LACS codings that the variability of this was very low i.e. it was almost invariably rated '1' (unstable). This casts doubt on the appropriateness of considering this dimension in the analysis.

Exploration of internal-external, and stable-unstable dimensions

A significant association was found between perceiving causes as internal for suspect (as measured using the LACS) and shooting frequency when considering the total data set (r_s = .32, p < .05) and when considering attributions concerning shooting behaviour only (r_s = .30, p < .05). Perceiving causes as internal to the suspect was not associated with overall competence however (r_s = .07, p = .61), or shooting accuracy (r_s = -.08, p = .57).

When considering data from both the LACS and the ASQ, no significant associations were found between perceiving causes as internal or external to self and general competency, shooting frequency, or shooting accuracy. The correlations are all in the predicted direction but fail to reach significance.

Further analysis revealed that overall competence was significantly associated with age of officer (r_s = .37, p < .01), years experience in the police force (r_s = .47, p < .001), and years experience in firearms (r_s = .50, p < .001). However, neither mean number of shots fired nor shooting accuracy was associated with any of these.

8.4 Discussion

This study sought to investigate the association between the attributions of police firearms officers in training and their performance in simulated shoot-don't shoot scenarios. It attempted to replicate a finding from the previous two studies, namely a significant association between high perceived control for client and punitive/retaliatory staff responses. The previous studies were built on in that the stimulus situation was held constant, objective measures of staff behaviour were used, and a different professional group at high risk of encountering violence in the workplace was studied. In summary, the study found that:

1 whilst the overall association between control for suspect and shooting frequency only approached significance (p = .06), in the case of attributions specifically for shooting behaviour, perceiving causes as controllable by the suspect was associated with firing more frequently, (p < .05) (hypothesis 1(a))

2 attributing causes as internal to suspects was associated with firing more frequently (p < .05)

3 overall general competency (but not shooting accuracy) was associated with higher age of officer (p < .01), greater number of years experience in the police force (p < .001), and greater number of years in the firearms division (p < .001).

Perceiving causes of simulated incidents as internal to suspects and controllable by them was associated with increased frequency of shooting when considering attributions made in accounts of shooting behaviour. This finding supports Pathway 1 (see Figure 8.1) in that attributing high control to suspect is associated with firing a greater number of shots. Shooting more rounds was not associated with greater accuracy and may represent inappropriate firing. This is consistent with the findings in the previous two studies. The association between perceiving causes as internal to other and violence is consistent with research from other areas such as child abuse (Stratton & Swaffer,1988).

Alternative explanations for the association between attributing high control to the suspect and increased frequency of shooting should also be considered. It may be that officers who have shot more frequently feel more necessity to distance themselves from the responsibility of their actions and thus place more emphasis on the suspect and his or her part in the incident. Herbert (1996) supports this contention, suggesting that officers' explanations following violent encounters with suspects are after-the-fact justifications intended for just this purpose. He suggests that police officers using excessive force have a tendency to deny responsibility when explaining their behaviour. Thus officers may voice the view that their use of force was the result of the behaviour of the 'bad boys' who initiated the encounter and attempted to do harm to the community. It does seem intuitive that officers who have shot would be careful about how they pitch their descriptions of the event and their role in it.

In their review of the use of firearms by police officers for the period 1998-2001, the Police Complaints Authority (PCA, 2003) reported that families of the suspects involved in the incidents suggested that because of the nature of the debriefing, 'the officers were given time to work out what was true and false and they got time to get their story straight'. This seems to support the view of Herbert (1996). Furthermore, in the present

study there was evidence to suggest that part of the training did indeed teach officers how to present their explanations, as the following excerpt from one of the interview transcripts demonstrates. In this instance a Firearms Instructor is talking to one of the trainees:

> *'I wanted to clarify it really to say that I understand why you're saying it was your responsibility, that the onus is on yourself because you are responsible for your own actions in that the officer that fires his or her own firearm is also going to be responsible for the final act. However, the tactical deployment of that officer in the circumstance that officer finds himself in may not be that officer's fault. That could be from the briefing, it could be from the circumstances in which they have been deployed. The ultimate responsibility will come onto what? A subject or criminal element and what he does in those circumstances. If they are compliant yeah, then the lethal option may not be deployed, it may be the fault of the officer incorrectly firing. But if they are non-compliant with police then that leaves the officer either able to use less than lethal options and if the less lethal would fail then it leaves the officer with no choice but to use the lethal option of actually firing his or her firearm. All right. So have that firmly set in your mind all right?'*

It could be argued that the trainee is being taught how to express himself and specifically to make internal controllable attributions for the suspect.

It is interesting to consider the potential importance of teaching officers to view situations concerning threatening suspects in a particular way i.e. internal and controllable by the suspect. Research from other settings has found that perceiving clients as in control of negative outcomes is associated with retaliation and this can be interpreted in a negative way. The previous study is an example of such a finding. However, a healthcare professional retaliating with violence to a violent patient is obviously quite different to a police officer dealing with an armed suspect. Thus, what could be considered to be adaptive cognitions in a healthcare setting may well be inappropriate in a policing setting where it is expected

that the officer will shoot when required. It could be argued that, if the officer were inclined to view situations as outside of the control of the suspect, they would be less likely to shoot, which could actually be problematic if the officer is faced with a suspect presenting a real and immediate threat to the officer and/or the public. It may therefore be quite adaptive in this setting to view situations as internal and controllable by the clients, and to be prepared to shoot if necessary.

Another issue to consider here is that the instructors are not merely teaching the officers what to say but are training them in the law, which has an impact on the attributions they express in shoot-don't shoot scenarios. They must be able to demonstrate that their actions were proportionate, reasonable in the circumstances, absolutely necessary, and the minimum use of force required (Criminal Justice Act, Section 3). If any one of these do not stand up, then the individual officer could potentially be charged with a criminal offence in relation to their shooting. Where a death has resulted, this could be a charge of murder. Therefore, the motivation to explain behaviour in a particular way is great.

It might be beneficial to conduct research of this kind with more naïve officers than were in the current study. This is because the attributions made during the debriefing may reflect, at least in part, how the officer has been taught to conceptualise shoot-don't shoot situations. This may also help to explain lack of significant correlations between attributions of control for self and perceptions of events as external for self, and performance, which is in contrast to findings from other areas. It could be interesting to examine new recruits to the police force generally, rather than focusing on firearms officers specifically as all police officers in operational roles may have to deal with violent suspects. New recruits with no police training could be considered to be a more appropriate sample in that firearms officers have already had some police training in the management of violence and the law relating to this, prior to commencing firearms training.

The situation of a member of public encountering the drunk/sick person on the subway is quite different to that of the nurse dealing with a violent patient, which again is in contrast to the police officer dealing with a potentially fatal incident with an armed suspect. Thus the nature of the situation itself, the individual's role in that situation, his or her personal background, as well as training and experience, will influence their attributions and the interaction of these with their emotions and behavioural responses. It may therefore be considered somewhat naïve to expect that a model such as Weiner's (1995) can be applied universally, regardless of the situation and population under consideration.

The fact that no significant associations were found between attributions (as measured using the LACS) for suspect and general competency ratings or shooting accuracy requires some consideration here. In fact, shooting frequency is the only behavioural measure used in this study which could be considered to reflect retaliatory responding. Both general competence and shooting accuracy are actually measures of specific work skills. Whilst research from other areas (such as sales staff customer care; Silvester et al., 2003) suggests that perceiving negative outcomes as internal and controllable by the customer is associated with poorer work performance, Weiner's (1995) model is actually concerned with the behavioural responses of helping versus violence.

Although there were no significant associations between controllable-uncontrollable or internal-external attributions for self and shooting frequency, the correlations were in the predicted direction when considering attributions coded from both the LACS and the ASQ. It would be interesting to replicate this study using a larger sample of firearms officers as the lack of significant findings could be due to a Type II error.

The lack of significant correlations between the LACS codings and ASQ scores requires some consideration here. In relation to the present study, it is noted that the police officers appeared to have particular difficulty in completing the ASQ. A number of participants queried the purposes of the questionnaire and appeared to be suspicious about it, for example asking who would have access to their responses and what the information would be used for. This was despite prior reassurances about the anonymity of the data. It is interesting that no such reservations were expressed concerning the taping of the debriefing interviews. It is also noted that a number of officers (N = 7; 13.5%) initially denied having ever experienced unsuccessful or unpleasant situations whilst at work and therefore did not wish to complete the negative scenarios questions on the ASQ, although all did so with encouragement. The reactions of the officers to the ASQ and the problems noted in completing it could cast doubt on the reliability of the data that was obtained from the questionnaire with this group of professionals. This is not a problem that has been reported in studies of other groups of workers using this methodological approach.

Another potential problem with the use of the ASQ in this research, is that the examples used were general to the area of work rather than focusing specifically on violent incidents. Thus the situations which the officers selected as examples may have been quite different to the scenarios which were the basis of the LACS interviews. The following examples of 'a recent incident at work which made you feel bad' described by the officers in the ASQ illustrates the range of situations selected:

'The detainee had been brought in drunk and when released alleged that I had not returned property to him. He refused to listen to reason and would not view a video recording of the incident which would have shown him to be mistaken.'

'I had to wake a lady in the middle of the night to tell her her husband had died.'

'I failed to obtain a conviction on a drink-drive case in Court.'

If comparisons between the LACS and ASQ measured attributions are made in future investigations in this area, it may be advantageous to base the ASQ scenarios on the actual CineTronic™ training situations that officers have undergone.

8.5 Conclusions

The findings from the present study provide tentative support for Pathway 1, in that a significant association was found between perceived control for suspect and frequency of shooting, when specifically discussing shooting behaviour. However, the strong support for the relationship between high perceived control for client and retaliatory responding found in the previous study was not replicated. It would be useful to replicate this research with a larger sample of naïve officers as the training and experience of the officers and the relatively small sample could have influenced the results. It should also be considered that associations between attributions and behaviour may vary according to a number of factors including the role of the worker, job characteristics, the nature of the training provided, and the potential consequences of expressing certain types of attributions. It is important that attributional models are not applied rigidly across different occupational groups; it is necessary to consider the nature of the population and circumstances under investigation. Further research could address these limitations and further our understanding of the relevance of Weiner's theory of social motivation to staff who work with violent clientele.

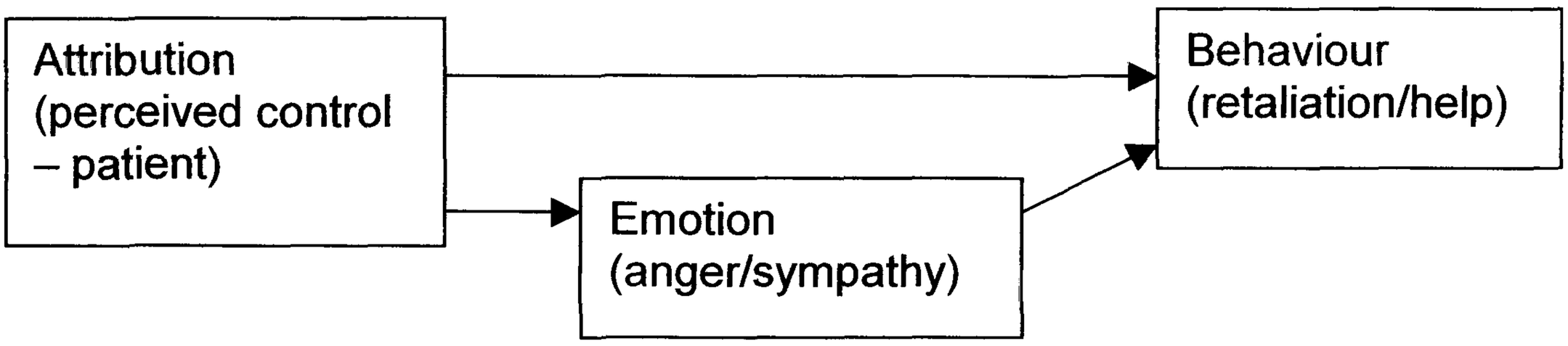
CHAPTER NINE

General Discussion

9.1 Introduction

The series of studies presented in this thesis set out to examine the applicability of Weiner's (1995) attribution-emotion-behaviour model to the understanding of violent interchanges between staff in high-risk professional groups and their clients (see Figure 9.1).

Figure 9.1 Weiner's (1995) attribution-emotion-behaviour model



Weiner's (1995) model can be viewed as two potential pathways by which attributions may influence the behaviour of staff dealing with violent incidents involving clients. Pathway 1 represents a direct association between the attribution and behaviour and is illustrated in Figure 9.2. Pathway 2 considers the relationship between the attribution and behaviour to be via the staff member's emotional response. This is illustrated in Figure 9.3.

Figure 9.2 Pathway 1

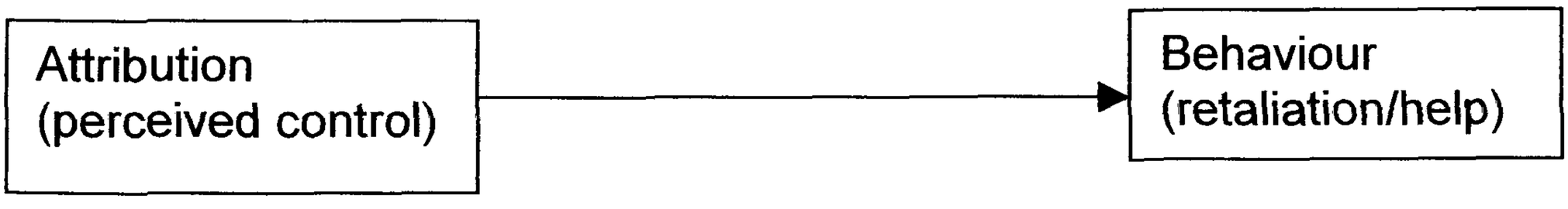
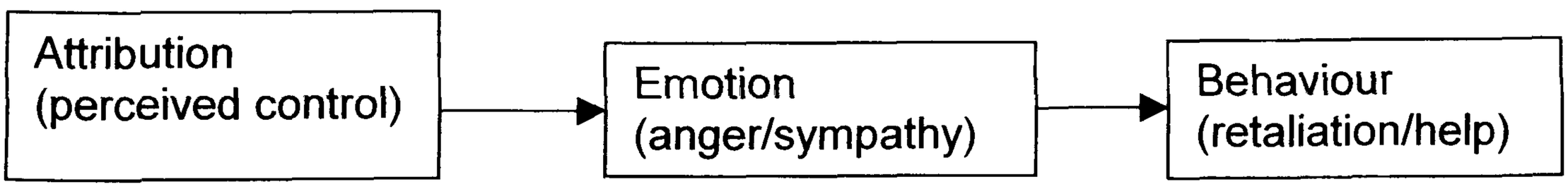


Figure 9.3 Pathway 2



The research aimed to advance the literature in this area by: first, examining real rather than hypothetical events; second, applying different measures of attributions, emotions, and behaviours, to those which have been traditionally used; third, including larger numbers of participants and situations; fourth, considering gender issues; fifth, investigating the behavioural response of retaliation in addition to helping, and sixth, evaluating the extent to which findings can be generalised across professional groups. An initial pilot study assessed the utility of the Leeds Attributional Coding System (LACS) for extracting and coding attributions from psychiatric nursing staffs' accounts of violent incidents involving patients. It also examined between-staff differences in attributions made for a target patient. The potential for coding emotional and behavioural responses of staff from transcripts was also explored. In addition, the Camberwell Family Interview (CFI) was evaluated as a means of producing appropriate data from which attributions could be extracted and coded. Three studies followed this. The first was a field study which looked at naturally occurring attributions in documentation completed by nursing staff in a psychiatric secure unit following violent incidents which involved the physical restraint of patients. This study tested Pathway 1 depicted in Figure 9.2; the associations between attributions of control (for patient) and behavioural outcomes such as providing medication (helping) and use of seclusion (punitive/retaliatory), were examined for male and female patients.

The second study tested both Pathway 1 and Pathway 2, depicted in Figures 9.2 and 9.3. It examined attributions, emotions, and behaviours coded from interviews with psychiatric nursing staff concerning violent incidents involving male and female patients. The third study tested Pathway 1 (Figure 9.2) in a sample of police firearms officers undergoing refresher training in shoot-don't shoot scenarios. This study examined situations involving males only, held the stimulus situation constant by using simulated scenarios, and used objective measures of behavioural responses.

9.2 Overview of results

Results from the pilot study suggested that nurses do make attributions in their accounts of violent incidents involving patients and that it is possible to extract and code these using the LACS. Although this was a small exploratory study the results of which were not subject to statistical analysis, the findings indicated that there are individual differences in the attributions psychiatric nursing staff make about a target patient. In addition, it was noted that it was potentially possible to code emotional responses, helping behaviour, and violent retaliation from interview transcripts. The flexibility of the CFI format was considered appropriate for obtaining accounts from staff which could be coded using the LACS, but not all questions were relevant.

The first study examined nursing staff's attributions of control (for self and patient) and behaviour in relation to violent incidents involving patients in a more systematic way. Several interesting findings emerged; firstly in terms of patient gender, and secondly in terms of apparent differential applicability of the model to helping versus retaliatory behavioural outcomes. Control for patient was significantly associated with the punitive response of seclusion for both male and female patients. However, in the case of male but not female patients, the helping response of provision of medication was more likely when staff perceived the incident as uncontrollable by the patient. Thus the attribution-behaviour association held for both male and female patients when the outcome was punitive, but not when it was help oriented. In addition, female patients were more likely to be secluded than male patients and staff were more likely to state that they had 'no explanation' when describing incidents involving female patients. Other, non-gender specific results were found. There were differences in the amount of control staff perceived themselves as having over incidents involving infrequently restrained patients compared with frequently restrained patients, with more control perceived for the former group. They were also more likely to use seclusion as a management strategy when the cause of the incident was

perceived as 'neither controllable nor uncontrollable' by themselves, and 'controllable' by the patient.

Overall, the results suggest that the proposed model may hold in the case of punitive/retaliatory responses, but only for male patients in the case of helping responses. However, only Pathway 1 was tested (the association between perceived control and behavioural responses) and statistical challenges meant that the results could only be considered tentative.

The second study aimed to specifically test both Pathway 1 and 2, in relation to violent incidents involving male and female patients. Again, some interesting patient gender differences were found. For male patients only, Pathway 1 was supported. In terms of Pathway 2 (for male patients), correlations were found between high perceived control for patient and anger, and high perceived control for patient and retaliation. However, the association between anger and retaliation only approached significance. In addition, correlations were found between low perceived control for patient and sympathy, and low perceived control for patient and help. These associations, and significance levels, are illustrated in Figure 9.4. For female patients, Pathway 1 was not supported. In terms of Pathway 2 (for female patients), anger was associated with retaliation. Low perceived control for patient was associated with sympathy and the association between sympathy and helping approached significance. Staff anger was associated with retaliation. These associations, and significance levels, can be found illustrated in Figure 9.5. In addition, for female patients only, perceiving causes as internal to patients, external to self, and sympathy for patient, was associated with more years staff experience. Staff age (but not experience level) was found to moderate the anger-retaliation relationship for female patients, such that the relationship was stronger for older staff. This moderating effect is also depicted in Figure 9.5. It should be noted that the direction of the associations as shown in Figures 9.4 and 9.5 are postulated on the basis of Weiner's (1995) model rather than proven as they are based on correlations.

Figure 9.4 Attribution-emotion-behaviour model – significant findings for male patients (Study 2)

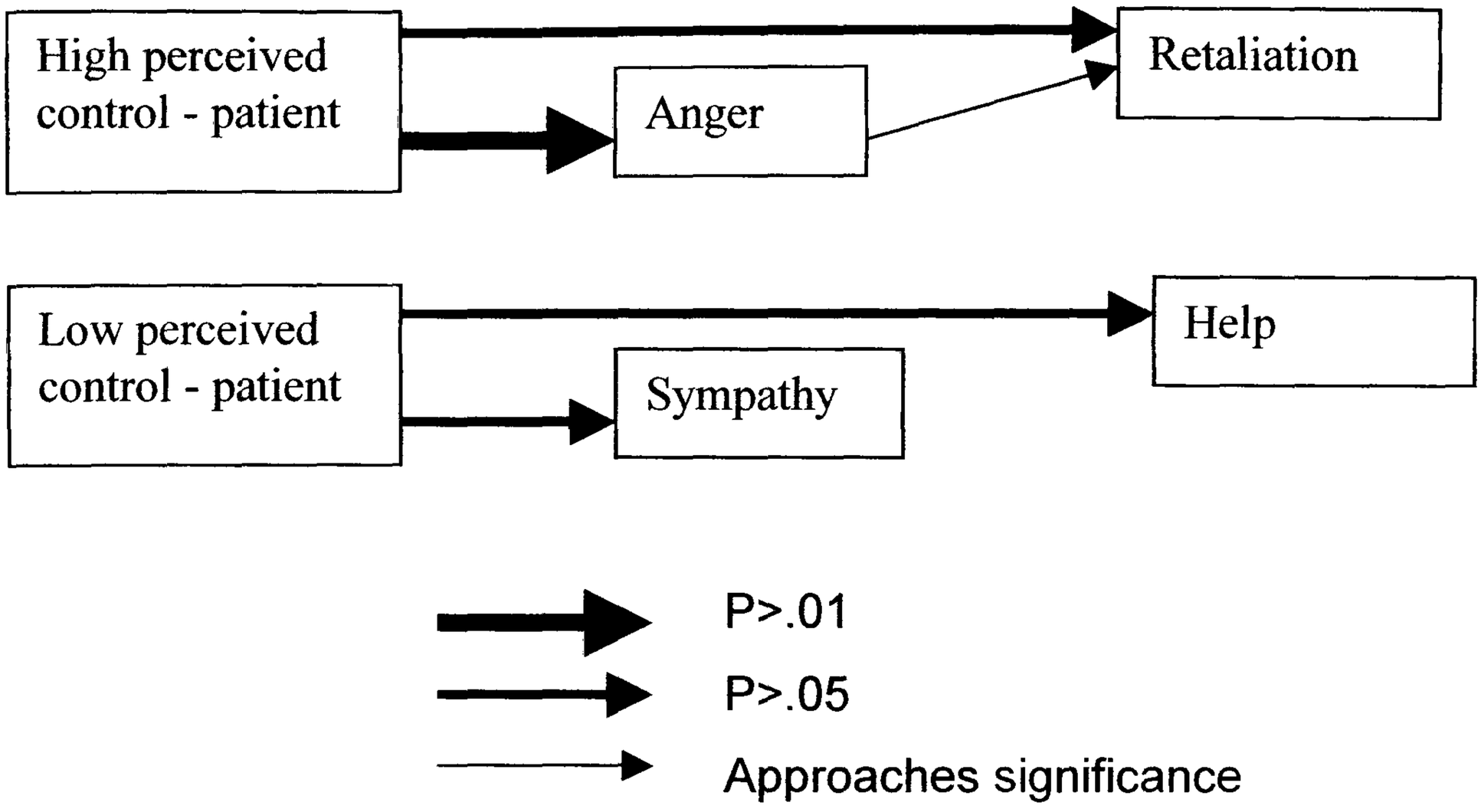
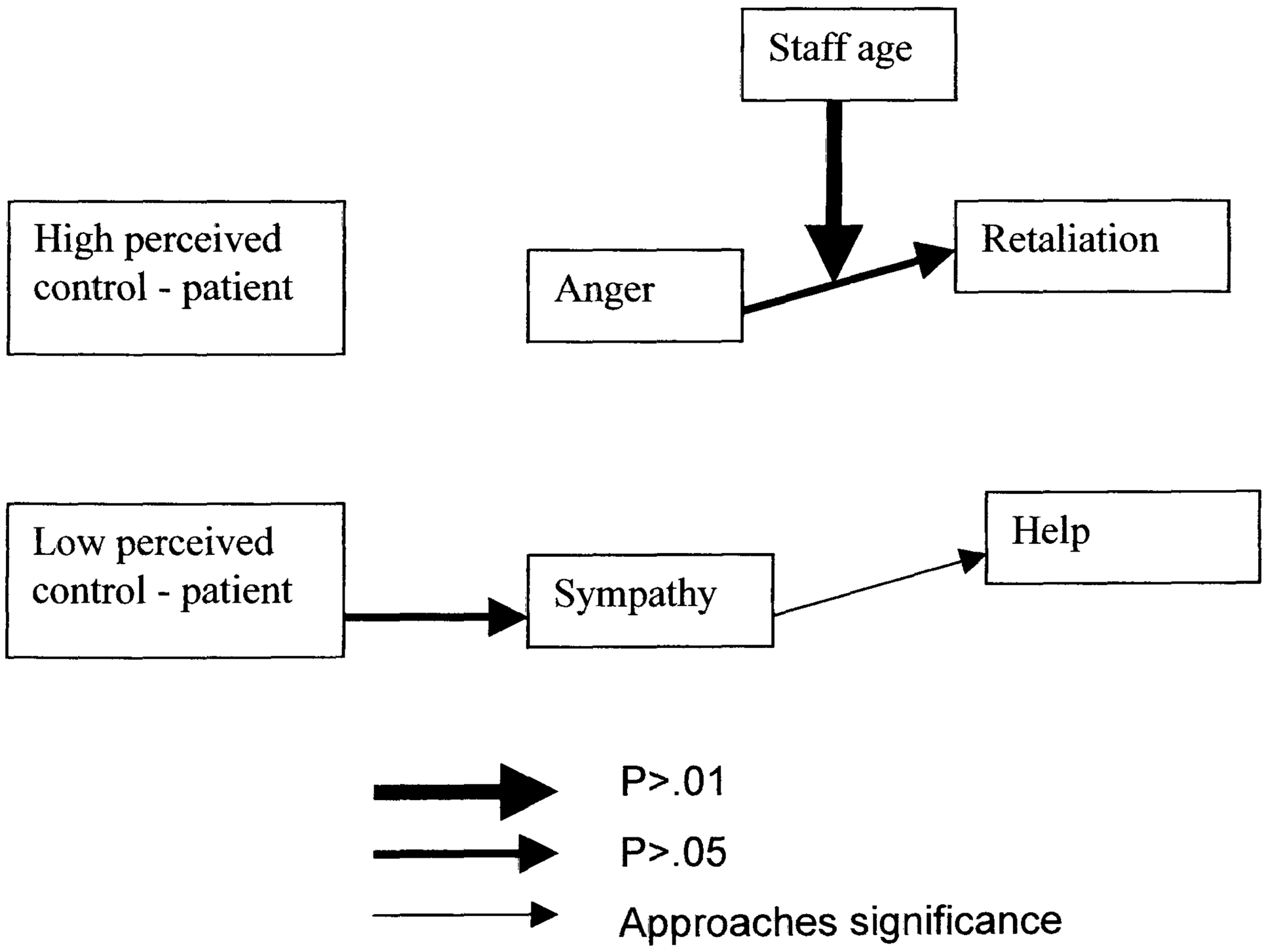


Figure 9.5 Attribution-emotion-behaviour model – significant findings for female patients (study 2)



n.b. directions indicated by arrows in Tables 9.4 & 9.5 are postulated only as findings are based on correlational data

Overall, the findings suggest that Pathway 1 holds for male patients but not female patients. Pathway 2 does not hold although some predicted relationships within this pathway are supported. The associations differ depending on the gender of the patient.

The third study looked at Pathway 1 for controlled simulated incidents involving male clients only, and with a different professional group; firearms officers in training. Some further support for Pathway 1 was found in that, when explaining shooting behaviour, perceiving causes as controllable by the suspect was associated with more frequent firing. Shooting more often was not associated with increased accuracy and may represent inappropriate firing. Perceiving causes as internal to the suspect was also associated with increased frequency of firing. Contrary to prediction, perceiving causes as external and uncontrollable for self were not significantly associated with increased frequency of firing. However, the correlations were in the predicted direction for both the ASQ and LACS measured attributions. An additional finding was that general competency was found to be associated with higher age of officer, greater number of years experience in the police force, and greater number of years in the firearms division. However, age and experience were not significantly associated with shooting frequency or shooting accuracy.

9.3 Limitations of present research

9.3.1 Power considerations

One limitation of the research presented in this thesis is that of statistical power, or sample sizes. Although a priori power considerations were made (Faul & Erdfelder, 1992), medium or large effect sizes were assumed which renders the findings less powerful than if small effect sizes were assumed. Recruitment of a larger sample may have led to more support for the research hypotheses and an increase in significant findings. The relatively

low power of the studies reported means that Type II errors may have occurred, i.e. significant findings may not be detected.

Factors which limited the sample sizes, such as the clinical nature of the research and the methodology selected, however, also represent particular strengths of this research. Analysing what staff actually say during interviews about violent incidents in which they have been involved is a time consuming approach, but it is one which yields much rich data about real situations. It is also unique in research in this area. Future investigations using larger samples could help to clarify the findings from this research.

9.3.2 Nature of the samples

A number of sampling issues may be considered to have limited the degree to which the findings from the studies reported in this thesis can be generalised. The nursing staff who were interviewed in both the pilot study and study two all knew the respective interviewers, which may have influenced their responses. In the first instance, the interviewer was the researcher who was also employed at the hospital as a forensic clinical psychologist and, in the second instance, the interviewer was a nurse at the hospital who was responsible for providing training in de-escalation of violence and physical restraint. Using interviewers who were known workers at the hospital where the study took place could have led to biased responding. Staff may have been concerned that their views and reported behaviours would be fed to back to management, which could have implications for their employment. It could be argued that staff may thus have felt inhibited and not spoken frankly about the manner in which they dealt with conflict situations and their thoughts and feelings surrounding the incidents.

Despite the fact that the staff knew the interviewer, and the possible inhibitory effect this could have on their narratives, a significant proportion of transcripts did involve descriptions of angry feelings, neglect and retaliation.

It could be that the relationship participants had with the interviewer actually had a positive impact. Perhaps staff felt more able to disclose negative feelings and behaviours to someone they knew and trusted. Thus, familiarity with the interviewer could actually be beneficial. Whilst known to the participants, the interviewers for the second and third studies were blind to the aims and hypotheses of the research which is a strength of those studies. Thus the interviewees would not have been inadvertently led into certain types of responses.

Only qualified staff were included in the samples for each of the studies. Future research could examine qualified and unqualified staff/new recruits, in order to further investigate the impact of training on staff attributions, emotions, and behaviours. It could also be beneficial to look at samples from different facilities in order to evaluate the influence of such factors as organisational culture.

9.3.3 Statistical issues

There were some statistical limitations, particularly in relation to the first study. It is unfortunate that staff and patient replication in the data renders the information so challenging to analyse since the reports of the staff provided a rich source of attributions which were made immediately following real violent incidents. This problem is not unique to the setting studied here. Hodgkinson, McIvor and Phillips (1985) for example, in a retrospective study on a locked intensive care ward found that 20% of the patients accounted for 50% of the violent incidents recorded. Similarly, Rix and Seymour (1988) found that two patients in a regional secure unit accounted for 48% of all violent incidents over a one year period. The use of Kruskall Wallis Tests to evaluate homogeneity of the data goes someway to addressing the statistical problems encountered in the analysis of this data.

Certain other statistical issues arose in the research. In particular, the fact that some of the data were not normally distributed meant that the usual t-

tests could not be performed. In some cases the Sign Test was used as not only were data not normally distributed, but also the appropriate histogram was not symmetrical. A major limitation of the Sign Test is that it is very crude in that it ignores the magnitude of the differences, looking only at the sign. This means that power is lost. The problem of abnormal distribution as well as lack of symmetry did not invariably occur, however. Also, such tests did not constitute the bulk of the statistical analysis.

In terms of the correlations, it was necessary to use Spearmans' correlation rather than Pearsons' product-moment correlation, again as a result of the abnormal distribution of some of the data. This also meant that regression analysis was not appropriate in all cases since residuals did not always have acceptable distribution. Thus the potential mediating effects of certain variables could not be evaluated. As correlations cannot inform us about the direction of causality, this could only be postulated on the basis of the model tested.

Although it is unfortunate that the statistical analysis could not be taken further, a range of important findings are made within the boundaries of what is statistically meaningful. Studying spontaneous attributions in real life complex clinical situations provides a rich data source which is not always straightforward to evaluate.

9.3.4 Measures and methods used

Other methodological limitations can be found in the various measures and methods used. These will be addressed in turn.

9.3.4.1 LACS[10]

Overall, inter-rater reliability for the various LACS dimensions studied was certainly acceptable. The global-specific dimension was dropped because it

[10] General critique of the LACS and measures of spontaneous attributions generally can be found in Chapter 4.

could not be reliably coded. This is not a problem which is unique to this study, however (e.g. Stratton et al., 1986).

The kappa scores were generally lower in the first study. This may have resulted from the manner in which the attributions were coded which followed Brewin et al. (1991). The extracts to be rated comprised passages of text in which mention of one or more specific causal factors could occur and the extract could mention causal factors at opposite ends of the same dimension. The fact that more than one attribution could occur in the same passage and yet an overall rating was given rather that rating each attribution individually could account for the lower reliability. Future studies using similar data may improve reliability by rating each attribution separately.

In this research, the extracted attributions were not coded according to agent and target, which is something which the LACS allows. Subdividing the data in this way could also reduce the power of the findings as it would mean that fewer attributions would occur in each category. Given the power limitations already discussed, it was decided that it would not be appropriate to examine the data in this way. However, future research incorporating larger numbers of participants, and hence generating higher numbers of attributions could consider using this approach.

Despite potential criticisms of the LACS this methodology did allow for coding of attributions in discourse which is a particular strength of this research which differs from other similar work which relies almost entirely on questionnaire measures.

9.3.4.2 ASQ[11]

This measure was used in only one study. Various criticisms could be levelled at the ASQ as a measure of attributions. One particular problem

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[11] General critique of the ASQ and questionnaire measures generally can be found in Chapter 4.

with the questionnaire is that it compounds attributions for self and attributions for other, with these both being measured as one dimension. Thus it is assumed that making an uncontrollable attribution for self means that a controllable attribution for other is made. This does not necessarily follow as the following example demonstrates:

> *"It all happened so quickly. We weren't sure what to do because it was forced upon us by Control who told us to pull in to the forecourt."*

In this case the officer perceives the outcome (we weren't sure what to do) as uncontrollable by himself, uncontrollable by suspect, but controllable by Control who were instructing them. Attributions for self from the LACS were not associated with the behavioural outcome (frequency of shooting) whereas attributions for suspect were. This highlights the need to consider control for self and control for other separately. As a measure of attributions for a specified other, the ASQ could be argued to be inappropriate as it only really measures attributions for self.

The ASQ was not the main measure used in this research. The difficulties encountered in its use here are of methodological interest, particularly in view of the widespread use of the ASQ in research in this area.

9.3.4.3 Simulated scenarios versus real events

In the nurse studies real events were used whereas in the police study simulated scenarios were used. These methodologies each have their pros and cons. Real events have the advantage of rich contextual data which is lacking in simulated scenarios but have the disadvantage of being outside of the researchers' control. Simulated scenarios, whilst being highly controllable, could be considered to be false. In certain transcripts from the second study, the serious nature of the incidents described and the psychological impact on staff was, at times, striking and moving. This is perhaps something that does not come across in the studies as reported in the body of this thesis. The following excerpt illustrates the type of situation

that psychiatric nursing staff encounter when working with patients in medium secure settings:

> *"...and it was a bit of a blur because what she was trying to do was to actually gouge my eyes out and all I did if I can remember was just close my eyes and try to defend myself. She managed to scram me quite badly. She didn't actually manage.....I think I was quick enough to you know to hide my eyes from her and she was sort of raining a few punches down on me and I just curled up into a ball. And I don't think I shouted out. It was a form of shock as well because I just wasn't expecting it. And then staff arrived and it took 3 of the staff to get her off me. I can remember rolling out of...somebody had her legs, somebody had her head and they said that they had a real job to.... she got my shirt and I think she had a handful of hair but I think they had a real job just to release her grip on me. Anyway they managed to do that and when they said – you're clear now, I rolled away from her. She's lying on her back and she'd been at an angle. She'd taken me down with her so I rolled away from her and I isolated her arm and the nurse in charge said to me its ok we've got the situation. I said I'm ok I've got her secure. He said no you're not ok you need to go and sort your face out. And I thought what the bloody hell's he on about? I didn't know.... it was bleeding quite a bit so I had to clean that up."*

The following examples show the type of impact such incidents can have on staff:

> *"That particular episode, it made me really think about what had happened. I mean, I spent hours and hours thinking about it, playing it out to different scenarios, different outcomes...yes it did shake my confidence for some time."*

"I felt like it shouldn't have happened. I really felt that I'd done something wrong because it had never happened to me before. I've been in situations where I have been physically threatened, where patients have been very angry, very abusive, but successfully managed to extricate myself without any problems, and usually managing to diffuse the situation. On this occasion it surprised me and I did feel more annoyed with myself than the patient really that I'd allowed it to happen."

It could be argued that simulated scenarios which the participants clearly know are not real incidents cannot be experienced as highly traumatic. A few staff stated that the scenarios felt false, as the following example illustrates:

> *"I feel it was a strange set up. I would imagine if we were out and about it'd be a case of two vehicles: 'oh there, we'll pull those. Let's follow them'…this and that. You work with somebody, you communicate with them. Now though, it feels like totally alien. Its all just there in front of you, and so you're sat there and as I said, you feel you're very conscious of the fact that you're thinking: 'well, should I now be saying oh there's those two motorcyclists, let's follow them shall we?' So you just feel as if its a little bit artificial. I accept that this is the best we can possibly do. It just feels false."*

Many officers in the firearms study got very involved in the scenarios and found them quite realistic, however. For example, one officer, when asked if he believed that he was being shot at during a scenario responded:

> *"Yes, I did, yeh. And a threat yeh. It was a definite threat I was being shot at yeh. I felt worried… concerned. That's lessened slightly now, but not a lot, 'cause the adrenalin's still there. You've still got the adrenalin rush…calming down slowly from that incident. I mean the threat, I mean when a threat's there you get the adrenalin rush then, and now its coming down slowly but you've got other factors coming in like analysing…did you take the right shot at the right time, did you hit, did you miss?"*

Similarly, officers who have been involved in a real shooting incident have been found to state that they found the actual event to be very like the training scenarios they had previously experienced (Burrows & Murphy, 1994). However, Interviewing firearms officers following real incidents which they have attended where they have been given authority to arm would be of interest here, although the actual number of incidents in which shots are fired in such situations is small; a total of 24 incidents for the period 1998-2001 (Police Complaints Authority (PCA), 2003), which means that such a study would not be parsimonious.

It may be important to take into consideration the severity of the incident in question when investigating staff's attributions and behavioural responses. This was not done in the case of the nurse study where the incidents described ranged from verbal threats to serious physical assaults. It may be useful, in future research, to examine attributions, emotions, and behaviours for high and low severity of incidents separately.

8.3.4.4 Interviews

There are some general disadvantages of self-report data that have been highlighted. In particular, the issue of validity has been addressed. As such data are personal and idiosyncratic, they may not be a direct reflection of 'reality', as perceived by others. In addition, individuals may be motivated to be untruthful about their views for a variety of reasons. Thus a nurse may not wish to reveal feelings of anger towards patients to a researcher as this may portray them in an unfavourable way. Participants may be reluctant to reveal possible unprofessional conduct in a taped interview. Psychiatric nursing staff for example, may perceive that involvement in a violent situation with a patient will be seen as failure on their part and they may be judged to have mishandled the incident and thus deemed professionally incompetent (National Audit Office, 2003). A known source of bias is an individual's tendency to attribute their own negative behaviours to situational factors and the negative behaviour of other to dispositional factors, the so called 'fundamental attribution error' (Fiske & Taylor, 1991; Jones & Nisbett, 1971).

People tend to take credit for success and deny responsibility for failure (Fiske & Taylor, 1991). Clearly these limitations inherent in the use of self-report measures need to be taken into account in any study which investigates individuals' attributions. This issue is difficult to overcome. The flexible format of the interview used in the initial pilot study and Study 2 aimed to provide participants with the opportunity to describe incidents in their owns words and from their own perspectives. The use of interviewers who the participants knew and appeared at ease to talk with also may have helped to minimise bias in accounts. However, it must be acknowledged that people's narratives about difficult situations are not pure and objective. In many ways this is what makes them a fascinating focus of study.

Another difficulty with self-report is that the individual may not be able to provide information in the detail required or use the concepts that the researcher is interested in (Barker et al., 2002). With specific reference to the study of attributions, it has been claimed that people are not always aware of the causes that influence their behaviour (Nisbett & Ross, 1980; Nisbett & Wilson, 1977). Research which obtains more objective data about staff's actual behaviour in incidents of conflict could further our understanding of how staff's attributions and emotions influence their responses to violent incidents involving male and female patients. An example of where this has been done is a study by Drinkwater (1988) who carried out a participant-observation study of psychiatric nursing staff interactions with patients. This type of study is not be without its' difficulties in terms of ethics and reliability, however. This problem was remedied to a certain extent in Study 1 of this research which looked at actual behaviours of nursing staff such as provision of medication or use of seclusion. Also, Study 3 used objective ratings of actual behaviour exhibited by staff, albeit in simulated scenarios rather than real incidents.

In Study 3, a further methodological issue concerning the use of interviews to obtain data arises. In that study, officers both worked in pairs and were interviewed in pairs rather than individually as this is the normal procedure

for firearms officers in training. Several potential problems are apparent with this methodology. The officers can influence each others behaviour during the course of the exercise and they may also influence each others explanations. The second officer to speak, for example, may be influenced by what the first officer has said. There are other implications of having two officers interviewed together, including that they may be inhibited in front of a colleague and thus not feel able to express their opinions freely, for example, they may think that the other person behaved in an inappropriate manner or be concerned that they themselves will be perceived in a negative way if they say what they really think.

For research purposes, interviewing officers separately could be considered to be a purer approach. However, this study took place in real training situations where interviewing officers in pairs is the standard practice. Therefore, the data obtained is representative of what really happens in debriefing interviews following shoot-don't shoot training scenarios.

9.3.4.5 Coding of emotions and behaviours

The coding of emotions and behaviours in the second study represents a new measurement approach in research in this area. Other studies have tended to use rating scales to measure emotional responses and behaviours (e.g. Sharrock et al., 1990). Given the potential biasing effects of such measures (Wanless & Jahoda, 2002; Jones & Hastings, 2003) emotions and behaviours were coded from the interview data. This is considered less prone to bias than questionnaire/rating scale approaches but still represents self-report data (Hollway & Jefferson, 2000). Jones & Hastings suggest that it would be useful to obtain observational data which could provide more objective information concerning staff's actual behaviour. However, they also acknowledge that there are ethical issues to overcome when such methodology is used. Also, whilst observations of staff may be helpful in terms of measuring behavioural responses but it would prove rather difficult to obtain a measure of emotional responses from observations since these

are essentially internal and as such are not so amenable to direct observation.

Another way of looking at emotions of staff from the interview data available would be to code staff's 'expressed emotion' (EE) (an index reflecting criticism, hostility, emotional over-involvement, and warmth) (Vaughn & Leff, 1976). Whilst the EE categories have been associated with particular attributions of relatives of patients with schizophrenia (Brewin et al., 1991), the extent to which they reflect the specific emotional responses with which the present research is concerned is questionable. Also, the time consuming nature of the EE methodology made this inappropriate given the constraints of the research. However, coding EE from the audio-taped interviews is an area of potential interest which could be considered in future research.

9.3.5 Cross-sectional design

The studies presented here were cross-sectional in nature. Correlational data can only inform us about associations and does not add to the understanding of causal pathways between constructs such as staff attributions and, for example, violent retaliation towards clients. Although in previous studies in related areas (e.g. Sharrock et al., 1990) have been able to investigate such pathways by means of path analysis, this was not possible in the present study due to the lack of supportive findings for the hypothesised mediating emotion variables (see Study 2). The extent to which the attributions made by the staff are the result of similar prior negative experiences is not known. A longitudinal study following up nursing staff from training and looking at subsequent helping, neglectful, and retaliatory behaviours may attempt to address this issue. Few researchers have gone any way to achieving this, with Perlow and Latham (1993) being one exception. These researchers examined physical abuse of patients by direct care staff. They gave 302 newly employed staff the Locus of Control Scale (Rotter, 1966) and then collected client abuse data over a two year period. During this period a total of 21 instances of client abuse were identified.

Incidents qualified for inclusion where an appointing authority of the facility concluded that abuse had occurred on the basis of evidence presented during investigation. It was found that individuals with high external locus of control scores were more likely to show violent behaviour towards patients than those with more internal locus of control scores. The difficulties inherent in the measurement of the outcome behaviours is one obstacle in such research. Whilst it would be possible to look at attributions of staff once they have been found to have neglected or abused a patient, the relative lack of such proven cases means that such a study would be unlikely to represent a parsimonious approach.

9.4 Discussion of main findings

9.4.1 Implications of findings for Weiner's (1995) model

For the purposes of this thesis, Weiner's (1995) attribution-emotion-action model of helping versus violent retaliation, was considered to postulate two potential pathways which are depicted in Figures 8.2 and 8.3. Support was found for Pathway 1 (a direct association between attributions and behaviour) for violent incidents involving males, but not those involving females. However, Pathway 2 was not supported. This is consistent with certain other recent research investigating the applicability of attribution-emotion-helping models to professionals dealing with challenging client behaviour (e.g. Jones & Hastings, 2003). There are a number of possible explanations for this lack of support. It could be argued that the model is not applicable to staff who have been trained to work with challenging clientele. This is because their training has specifically focused on the potential causes of the behaviours in question and they have been taught to use particular strategies for managing the behaviours. The training staff in professions at high risk of encountering violent incidents receive places them in a quite different position to the participants in Weiner's studies which tested his model (e.g. Weiner, 1980a) who included classmates in hypothetical classroom scenarios, or laypeople responding to vignettes about drunk

versus sick people falling over. Professionals have not only been taught about the causes of difficult client behaviour, but have also been trained in various appropriate management strategies. In addition, they will have certain views about their professional roles as helpers, or de-escalators, and so on. This position is consistent with that of Sharrock et al. (1990) who claimed that nursing staff are able to override their emotional responses to negative patient behaviour as a result of training and experience. Yet this appears better able to explain healthcare staff's responses to the violence of male patients than female patients.

There has been much focus on training healthcare staff to deal with violence in recent years, with a zero tolerance policy towards violence being endorsed by the Government (Dobson, 2000). Appropriate training concerning the causes of violence in order to enable staff to be in a better position to predict and deal with incidents has been recommended, as well as training in self-awareness so that staff are able to see how their own actions may contribute to or exacerbate any potentially violent interactions (Davies & Frude, 2001). Staff are taught a range of acceptable practices with which to manage violent patient behaviour: de-escalation techniques, the use of medication, physical restraint, and seclusion. Similarly, in law enforcement settings, police officers are taught a range of acceptable practices which are known collectively as the Use of Force Continuum which involves: officer presence, tactical communications, primary controls (such as armlocks and use of handcuffs), secondary control (such as incapacitants and batons), defensive tactics (such as takedowns with or without batons), and deadly force (empty hand/batons/firearms) (Criminal Law Act, 1967). Thus both psychiatric nursing staff and police firearms officers should have had significant training in the management of violence and as such are very different to lay persons encountering violence.

Thus the lack of support for Pathway 2 may result from staff training and work role understanding. However, it is acknowledged that these issues have varying levels of impact on individual staff and there is evidence that

attributions and emotions do influence staff's responses to client behaviour, albeit in not quite the way the model outlined in this thesis proposes. For psychiatric nursing staff, these associations differ according to the gender of the patient. The models which best fit the findings here are illustrated in Figures 9.4 and 9.5.

The extent to which the model can generalise across professional groups is an issue which has been addressed, to a certain extent, in this research. There was some tentative support for the association between attributions and retaliatory responses of police firearms officers in that the attributions of control for suspect made by them were associated with increased frequency of shooting. Other predictions concerning attributions and behavioural responses did not hold, although the other behaviours investigated (general competence and shooting accuracy) are general performance indicators which cannot be considered to be retaliatory responses. It is perhaps necessary to take into account work role requirements when investigating the associations between attributions and behavioural responses in work settings. Attempting to apply a model rigidly across different work environments could be considered to be unrealistic as different jobs have different requirements and expectations. The influence of these on attributional processes in professionals at high risk of encountering violence at work has not been addressed in the literature.

It may be useful to consider other theoretical approaches to this area which may enrich our understanding of staff responses in violent interchanges. One possible means of explaining staff behaviour in such circumstances is within the framework of the theory of planned behaviour (TPB; Ajzen, 1985, 1988, 1991). The premise of this is that the behavioural decisions people make are based on careful considerations of available information. This could be considered particularly relevant to firearms officers' behaviour in shoot-don't shoot situations since they receive extensive judgement training. However, the theory does take into account the attitudes or beliefs of the individual since a key feature of TPB is that intentions (motivation to act)

determine behaviour. There are three determinants of intention: first, the person's attitude or belief that that the behaviour will lead to a particular outcome; second, beliefs about whether significant others think that the behaviour is appropriate; and third, perceived behavioural control. In this case, the second factor would appear to be particularly pertinent. Not only are the officers subject to intense scrutiny during the training scenarios, but also they know that their behaviour will be subject to detailed analysis in the de-brief. This is also the case in real situations where they will be expected to justify their behaviour to others. The importance of behaving in a manner deemed appropriate is clearly influential in a work setting, and less so in the types of situations in which Weiner's (e.g. 1980b) original research took place, which involved spontaneous helping, or situations where neglect or retaliation would have less drastic consequences than in the case of a firearms officer dealing with a suspect. Considering other ways of explaining firearms officers' behaviour in shoot-don't shoot scenarios, such as TPB could therefore be of value.

Another area of potential interest is that of staff attitudes. Worden (1996) points to a number of typologies of police officers based on attitudinal dimensions which may impact on the way in which they deal with conflict situations. One of these he describes as 'tough cop', the officers fitting into this typology conceive their role as being serious crime control and perceive the public as generally hostile towards them. These officers are postulated to be the most likely to use excessive force. Another typology is that of 'problem solver'. Individuals in this category see their role in a positive way, which is to assist their clientele in working out solutions to their problems. Officers falling into this category are viewed by Worden as being the least likely to use excessive force as this is seen as inconsistent with their moral codes. Worden suggests that those officers with pronounced propensities to use force are likely to share opinions which distinguish them from other officers namely: they conceive the police role in narrow terms limited to crime-fighting and law enforcement, believe that using force at their discretion is an effective means of fulfilling their role, and view citizens as

unappreciative and/or hostile. Although this sounds eminently reasonable and likely, there is little research evidence to support it. Thus the presence of the typologies, and the association between them and propensity to use force, remain hypothetical. However, similar suggestions have been made concerning the attitudes of healthcare staff. Some researchers have suggested that certain healthcare staff have attitudes about their roles which are counterproductive when dealing with violent patient behaviour. Davies (1988, 1989), for example, noted that some healthcare staff attending violence prevention workshops made comments such as: 'I must stand up to him/her', 'I personally must be able to deal with everyone', and 'If you give an inch they take a mile'. Morrison (1990) suggested several typologies of staff involved in disproportionate numbers of violent incidents with patients. One of these is described as 'tough men' characterised by a tendency to exhibit an overtly controlling manner. Although, as with the typologies presented for police officers, evidence for the presence of the typologies is contradictory (Cembrowicz, Ritter & Wright, 2001).

Whilst a consideration of these areas would be of interest here, they do not perhaps differ that considerably from Weiner's (1980a, 1985, 1995) perspective.

9.4.2 General issues concerning gender differences

The gender differences found in studies one and two highlight the need to investigate healthcare staff's reactions to the behaviour of male and female patients separately, something which has not been considered in previous research in this area (e.g. Sharrock et al., 1990; Cottle et al., 1995, Stanley & Standon, 2000). This is an issue in forensic service research generally, where studies of patient/offender violence frequently do not report male and female data separately (Lart, Payne, Beaumont, Macdonald & Mistry, 1999). Logan (2003) points out that current knowledge concerning assessment of risk of violence in forensic populations has been carried out almost exclusively with data from male offenders and concludes that we actually

know very little about violence and violence risk in women. Some have suggested that the tendency to exclude female participants from such violence research reflects the general viewpoint that the violent behaviour of women is trivial and not of sufficient importance to warrant scientific study (Moffitt et al., 2001). Exclusion of females from such research may also indicate a denial of the very existence of their violent behaviour (Motz, 2001). These perspectives can serve to limit women's access to, and the development of, appropriate services (Pearson, 1998).

The fact that gender differences have been found in this research is of particular relevance at the present time when the development of appropriate services for women with mental health needs is high on the government's health agenda (Department of Health, 2002). Despite this emphasis, a number of recent documents have criticised forensic mental health services for continuing to fail to provide gender sensitive services (e.g. Barnes, Davis, Guru, Lewis, & Rogers, 2002; Bartlett, 2002). Despite the fact that women in mental health settings have been found to behave in a violent manner as frequently as men (Monahan et al., 2000), in its' section on services for specific groups of women, the Department of Health strategy does not consider this issue. Its focus is rather on services for women who have experienced violence and abuse, self-harm, personality disorder, dual diagnosis with substance misuse, perinatal mental ill health, eating disorders, and general offenders with mental ill health. How staff deal specifically with women who exhibit violent behaviour is arguably an omission from this important document. Bartlett (2002) points out that research into issues concerning staff management of violent women in forensic settings has not been given priority despite concerns about attitudes and lack of skills to meet the established needs of this group.

Given the lack of knowledge available about the risk factors that are important in female violence, it is difficult to see how staff training in management of this can be effectively developed without further research. It

is easy to see how staff dealing with violent females may find it hard to understand and manage the behaviour.

The fact that staff age moderated the anger-retaliation relationship may reflect different attitudes of older and younger staff towards the issue of female violence. Older staff may be more prone to view violent women as having broken a law of nature which says that women are passive carers, not 'active aggressors' (Lloyd, 1995). Thus older staff could react in a more retaliatory way towards violent women when they are angered because of underlying beliefs about the appropriate roles and behaviours of females. These may differ to those of younger staff who have grown up in an era where attitudes towards women have become more liberal. It would be interesting to explore these ideas empirically.

The gender differences found in the first two studies of this thesis were not considered in the third study where client gender was held constant. Since the findings concerning gender differences were of particular interest in this research, it would be useful to examine the extent to which it generalises to other professional groups who are tasked with dealing with client violence as part of their jobs. Interestingly, on one occasion in the police study, the usual CineTronic™ scenarios were not available and therefore substitutes were used. These substitutes were not ideal as they were from the USA and therefore were not so realistic for a UK population. However, unlike the UK based situations, one of the scenarios involved a female suspect who shot at the officers. One of the two participants who was assessed using the substitute scenarios made the following comments:

"I didn't expect the female to produce a weapon. I really didn't…I was sort of expecting the man to produce the handgun so my attention was focused on him and I was then very surprised when she fired two shots at us…I stood there, using the door as cover, but I was stood there sort of looking and not believing what I was seeing. It was like 'I really didn't expect you to do this' and then she fired it as opposed to had I come into the incident not having any preconceived ideas about what was going to happen. I would still probably looked at the males as most likely to draw the firearm but as I say, even so, my attention was diverted by them…I saw her with this gun…and I say, a little bit of disbelief on my part, this isn't really happening, it can't be her, and then she fired before I reacted and took a little bit of cover."

Although these are the comments of only one officer, they indicate that police firearms officers may also have difficulty in predicting female violence and that the apparent unexpectedness of this can have an adverse influence on their performance in shoot-don't shoot scenarios. Consistent with this, Doerner and Ho (1994) found that where the suspect was female or black, the incident was more likely to result in the death of an officer, suggesting that judgement is poorer in scenarios involving such suspects. It would be interesting to test the proposed models in this setting.

The issue of female violence is a vast under-researched area. Our understanding of its nature, causes, and risk factors is extremely limited. Not surprisingly therefore, there is a lack of knowledge about how to manage violent females appropriately and effectively.

9.4.3 Themes in staff narratives

Insights may be gained into the way nurses view conflict situations with patients by examining their narratives. The interviews provide a rich source of information, and coding attributions, emotions and behaviours is only one way of analysing the data. It is clear from reading the transcripts that there

are certain themes running through the narratives. One example is anger towards management which is expressed in many of the accounts:

> *"...apparently they discussed it on ward level and it was taken up through various management levels and still nothing was done. And that's what we saw at ward level. Later on because of a big incident involving him the ward wanted to involve the management team and nothing seemed really to have been resolved because everyone above the general nursing team said there was things that they weren't made aware of and instances they weren't aware of. And yet it was obvious that one way or another...it obviously wasn't taken seriously enough or it wasn't something they wanted to deal with for various reasons".*

> *"I can remember an occasion a couple of years ago when a patient became very angry with another member of staff and I stood by and he suddenly hit me on the top of the head with his hand which contained a pool ball. I suppose it knocked me out, I fell to the floor anyway. And when I sort of came round I grabbed two legs that I saw, I suppose that I was still in a kind of dazed condition, and I held these legs and I felt one trying to shake me off. As I was coming to myself I realised one leg was this nurse who was attempting to restrain this patient, and in the doorway was a senior member of staff, a manager, who thought it was quite a funny occasion and was actually stood there laughing. I regained my feet and I assisted in the restraint and in the restraint we took the man to the obs lounge, and the thing that stuck in my mind was that senior member of staff who thought it was extremely funny. And I must then have been 60 years of age and I was thinking in my previous experience, in all my previous experience in jobs I've had, a man of 60 would have been helped considerably to the degree that others would come in and take over from him to alleviate him. I'm aggrieved about that very much and feel aggrieved about that to this day and I probably will to the end of my days. When I got into restraint I didn't feel angry not towards the patient whatsoever. I felt that I dealt with it in a professional way. I restrained with the appropriate holds and so on, but my anger, which remains to this very day, was with regard to the senior staff member".*

Staff also expressed implicit or explicit anger towards colleagues who they considered had acted inappropriately as following excerpts illustrate:

> *"It made me fucking angry actually because I could see that it was not being handled as well as it might have been from the point of view of just how humanely a person could be treated. Ok the guy was extremely dangerous, extremely aggressive blah blah blah, but I just felt as though there was a certain small element occasionally of people provoking the situation when it didn't need to be provoked."*

> *"So he just ran the whole length of the corridor and, he's quite an elderly gentleman, and really kicked the door and he actually fell over. I think he'd hurt himself but he got back up and started kicking the door more and about, well I should imagine there was probably about 7 of us on the ward, and all bar myself ran and restrained him and dragged him into the seclusion room....and he was quite tearful and upset and apologetic immediately and I thought, he was an old man and I thought it was a bit excessive, and that annoyed me."*

> *"I can only go back to a few years ago when there was conflict on the ward I was working on at the time. I thought it was handled extremely badly by many people especially the very senior members and by that I mean....psychologists were making decisions that were impractical and it had become unworkable by the staff and yet they were expected to be the working boys of the situation".*

The extent to which some staff took responsibility for a negative outcome and may be seen to be blaming themselves following an incident is another issue which this research does not directly tackle. The following extracts are examples of this:

> *"I felt a bit inadequate. I knew all along I should have handled it differently. I suppose I was waiting for some guidance from the people who knew the ward and knew the staff and I let it go too far probably".*

Subjectively, it was noted from the interview data that in some cases staff clearly indicated that they felt strong sympathy for patients but felt unable to assist them because of their position in the healthcare hierarchy at the time of the incident as the following example illustrates:

> *"I came on the ward one day sometime after first working with this patient and it was obvious his jaw had been broken and set in the broken position. Initially no one was going to say what happened but what transpired was that he had urinated next to someone who had punched him in the face and broken his jaw and the staff's solution to that was to hide the patient. So they hid the patient for 3 or 4 months until his jaw set. Nothing was said or done about it…I was sickened by it and very sad to see that happening but not that surprised as well…I think it is an example of institutionalised brutality that prevails today and when I was a student doing my training. I felt really disempowered…all senior people on that ward were obviously involved in covering up the fact that this had happened. In large institutions you tend to find its a family run affair so if you decided to like try and do something about it you would probably end up complaining to the person's father or uncle or something like that so there was nothing directly I could do about it."*

As well as training and experience, staff's perceptions and expectations of the nursing role may also play an important part in determining responses to violent incidents. This is not something which was addressed in the present research. Morrison (1993) states that nursing staff working in psychiatric settings frequently describe their jobs in terms of controlling patients and reinforcing rules. She suggests that these views lead to a rigid set of staff behaviours which can provoke patient violence. Some examples of such

attitudes could be found in the transcripts from this study such as the following excerpts:

> *"I was a bit cruel doing this but I had a patient who was a bit chopsy and giving it hell for leather outside the room, being very abusive and calling me everything, calling everybody everything, and I decided that she needed to be told a few things pretty straight because she was taking the Mickey basically. I started down and she was calling me everything, and I'm one of those people that I don't care how ill the patient is they can learn to discuss things properly."*

> *"So there was a situation where this guy wasn't being completely contained and I could feel a restraint situation coming because he wasn't responding to boundaries and yet he really needed those boundaries at the time. We told him to sit down, he wouldn't sit down. This went on for about 20 minutes. He was pushing the observation room door open and in a sense, making a mockery of the situation really and other patients were witnessing it…He continually pushed boundaries which we had to maintain. That was the conflict I think, that he was so young and he had claustrophobia but we had no choice."*

The nurses in these examples can be seen to be rigid in applying rules regardless of the mental state of the patient at the time of a violent incident.

The incidents which the police firearms officers discussed were simulated scenarios and not actual incidents in which they had been involved. However, there was evidence that the officers were reflecting thoughtfully on the scenarios and their responses to them, as the following excerpts illustrate:

"I am sure I could have done lots of things differently. I didn't, like I say, I heard a shot from somebody, but I couldn't say whether they were firing at me or not, so I didn't fire my weapon, because the first I saw, or the main threat I saw, or not threat, the main thing I saw was them getting out of the car and then turn and get back in. So at that point I was not going to fire at anybody as they were getting in the car and leaving. I suppose if I'd been watching, the people I'd been watching had…I didn't get a good enough overview and I just concentrated on the guy that was left behind. I didn't see if the guy in front had shot at us. If he had shot in our direction I suppose I could have shot at him. I didn't shoot at him because I didn't see him fire".

"Yeh, I was too blasé about it. I really wasn't expecting any weapon of any sort to be produced. I don't think you really do expect someone to pull a weapon on you. So if it happens its one of those very rare occasions. But I still thought if I got out…I could have been perhaps a little bit, exercised a little bit more care, personal safety for myself. But even so, I still wouldn't get out brandishing a weapon at them on the information we had".

Future research investigating narratives of officers concerning real incidents are likely to provide equally rich data.

9.5 Concluding remarks

This thesis set out to test two potential pathways by which staff attributions about violent incidents involving clients may influence their behavioural responses. These pathways are derived from Weiner's (1995) attribution-emotion-behaviour model of helping versus violent retaliation. The findings from the series of studies presented suggest that whilst a direct link between attributions and behaviours was supported, this was only the case for incidents involving males. The second pathway, which involves emotion as a mediator between attributions and behaviour was not supported, although various relationships within this pathway did hold. Again, there were different findings depending on the gender of the client. Findings were somewhat

consistent across occupational groups. However, it may therefore be important to consider how different work roles and contexts may influence staff members' attributions, emotions, and behaviours when dealing with violent incidents. The contexts in which pioneering research in this area took place are very different to the real life experiences of workers confronting violence. Applying theoretical models of social motivation rigidly across a variety of diverse settings is perhaps naïve. These findings underscore the importance of conducting attributional research in context, taking into account not only organisational/environmental factors but also gender issues.

The studies presented here provide some insight into factors which influence how staff deal with complex conflict situations. The events in question, whether actual incidents that staff have been involved in or simulated scenarios, are serious and challenging situations for the staff concerned. Conflict does not have to be an entirely negative experience however. In fact the Chinese symbol for crisis consists of two concepts namely 'danger' and 'opportunity'. This emphasises the potential for conflict situations to lead to personal growth and insight (Donohue & Kolt, 1992). Increased understanding of the development of violent interchanges can lead to positive change in terms of staff's ability to manage violent clients in appropriate and skilful ways.

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Appendix I

Pilot Study: Summary of Research Project

It has been known for many years that conflict situations, which can include verbal disputes as well as physical violence, have been frequent occurrences in psychiatric hospitals. In fact, there is evidence that this is a growing problem. There may be many reasons why such situations arise and much research has focused on this.

This study aims to look into some of the reasons why conflicts arise and you have been asked to be involved because it is felt that your opinions will help us to find out more about this. This study takes the form of interviews which look at the different types of difficulties patients experience, the sorts of conflict situations that arise, and the reasons for these conflicts.

It is hoped that the results of this project will give new insights into the problem of conflict, and hopefully enable us to find new ways of reducing its' frequency on the wards at this hospital.

Appendix II

Pilot Study: Consent Forms

Part 1 **to be signed and dated by the patient participant**

Part 2a **to be signed and dated by the Responsible Medical Officer**

Part 2b **to be signed and dated by the Responsible Medical Officer**

Part 3 **to be signed by the researcher**

Part 4 **to be signed by the staff participant**

Parts 1 & 2 **to be held on the researcher file**

Part 3 **to be held by the patient participant**

Part 1 – Patient participant

I.....agree to be involved in the study carried out by Janice Leggett (clinical psychologist). I am satisfied that the purpose and procedures of the study have been fully explained to me by Janice Leggett. I have also received a written explanation of the study. I understand that my involvement in the study will be confidential and without prejudice to me, and that I can withdraw at any time.

Signed.....date.....

Part 2 – Section a

I.....Responsible Medical Officers to .....

do hereby give my approval to the involvement of the above named patient in the research project conducted by Janice Leggett (clinical psychologist). I have received a written explanation of the study.

Signed.....date.....

Part 2 – Section b

I.....Responsible Medical Officer to.....

am satisfied that the patient is capable of giving consent to involvement in the proposed research project.

Signed.....date.....

Part 3 – to be retained by patient participant

I, Janice Leggett (clinical psychologist), confirm to..... that all information relating to him in the study will be confidential and without prejudice to him.

Signed .....date.....

Signed.....date.....

Part 4 – Staff

I.....agree to be involved in the study carried out by Janice Leggett (clinical psychologist). I am satisfied that the purpose and procedures of the study have been fully explained to me by Janice Leggett. I have also received a written explanation of the study. I understand that my involvement in the study will be confidential and without prejudice to me, and that I can withdraw at any time.

Signed.....date.....

Appendix III

Pilot Study: Information Letter

Dear

Re: Research Project – Patient Aggression

I am currently investigating nursing staff's experiences of aggressive behaviour of patients at Llanarth Court Hospital. A summary of the research project is attached. Part of this will involve interviewing staff about a patient on the ward.

The interview will be approximately one hour in duration and the contents of the discussion will be confidential.

I am looking for volunteers from the nursing department.

If anyone wishes to find out more about the project, please feel free to contact me on extension 2212. Please could anyone who wishes to volunteer contact me direct.

I thank you in advance for your help.

Janice Leggett
Head of Psychology Services
Chartered Clinical & Forensic Psychologist

Appendix IV

Study 2: Information Letter

Dear

Re: Research Project – Patient Aggression

I am currently investigating nursing staff's experiences of aggressive behaviour of patients at Llanarth Court Hospital. Part of this will involve interviewing staff who have been involved in aggressive incidents or who have witnessed these in order to gain the nurse's perspective on such events.

The interview will be approximately one hour in duration and the contents of the discussion will be confidential. The interviews will be carried out by John Glasheen, Team Leader.

I would be grateful for as many participants as possible, as the more people interviewed the wider the breadth of experiences I will be able to incorporate into my findings.

If anyone wishes to speak to me about the project, please feel free to contact me on extension 2212. In any case, I will be contacting each of you individually in order to discuss the project.

I thank you in advance for your help.

Janice Leggett
Head of Psychology Services
Chartered Clinical & Forensic Psychologist

Appendix V

Study 2: Consent to participate & audiotape

RESEARCH PROJECT: PATIENT AGGRESSION

I .....confirm that I have received the information letter inviting me to participate in the above project and have had the research explained to me verbally by John Glasheen (Researcher).

I confirm that I am willing to participate in the project as explained and understand that the contents of the interview will be confidential and will only be used for the purposes of the research explained to me. I also understand that the information provided by me will be analysed along with that provided by others but that this will be anonymous.

Name:.....

Signed:.....

Date:.....

Witness:.....

Signed:.....

Date:.....

Consent to Audiotape

I.....give my consent for the interview conducted as part of the research into patient aggression to be audiotaped. I understand that the tape will be stored in a secure place and that the recording will *only* be used for the purposes of the research. It will not be shared with others at the hospital such as my line manager and will not influence my employment at the hospital in any way. I also understand that the recorded interview will be confidential and will be analysed with those from other participants and will be anonymous.

Name:.....

Signed:.....

Date:.....

Witness:.....

Signed:.....

Date:.....

Appendix VI

Semi-Structured Interview Schedule

I am interested in learning more about the role of the nurse within a medium secure setting and the causes of aggressive patient behaviour and good and bad outcome in managing that behaviour. The interview should take no more that one hour and will be tape recorded, but the material will be completely confidential. Your name will not be used and there will be no way that you can be identified. Information from this interview will be used in a very general sense and nothing linking you to the material will be passed on to the company.

I want to you tell me about some times when you were involved in conflict

situations with patients. I want you to think of four situations altogether.

Tell me about (describe) a situation you were involved in where there was

conflict with a patient .

Prompts: Tell me more about it.

What did you/others do?

What was the end result?

Allow for spontaneous choice of gender of patient for first incident, but then prompt to ensure that two incidents for male and two for female are described.

Thank you for taking part. Have you any questions about the interview?

Appendix VII

Study 3: Police officer briefing notes for instructors

It is important that the officers taking part in the study are appropriately briefed and given the option not to participate, or to withdraw at any time. Please use the following notes for the verbal briefing.

We are currently evaluating firearms officer training and part of this includes a research project carried out by Janice Leggett (Chartered Forensic & Clinical Psychologist). Janice is investigating officers' views about conflict situations in the workplace, and in particular violent encounters with members of the public.

The research involves completion of a questionnaire prior to the training scenarios. Also, the debriefing interview following the questionnaires will be audiotaped for analysis. Performance across a range of areas will be recorded and this information will also be included in the analysis.

All information will be confidential and anonymised. Data will be kept in accordance with the Data Protection Act.

It is reiterated that this is not compulsory and information obtained will only be used for the purposes of the research. You can change your mind and withdraw from the project at any time.

Appendix VIII

Study 3: Adapted ASQ

This questionnaire is about situations that you have experienced at work and what you think may have caused them. Please read each question and answer as honestly as possible. This questionnaire is confidential and not information regarding individuals will be passed to employer organisations.

Code number:

1 **Please think of a recent incident at work which made you feel good.**

What was it?

What was the main cause of that incident?

Please answer the following questions by circling the appropriate number:

A) To what extent was this cause

Totally due to me	1	2	3	4	5	6	7	Totally due to other people or circumstances

B) How likely is it that this cause will influence future events?

Very likely	1	2	3	4	5	6	7	Not at all likely

C) How likely is it that this cause will influence a wide range of work events or areas of your life?

Very likely	1	2	3	4	5	6	7	Not at all likely

D) How much control do you have over this cause?

Totally Controllable by me	1	2	3	4	5	6	7	Not at all controllable by me

2 **Please think of a recent incident at work that made you feel bad.**

What was it?

What was the main cause of that incident?

Please answer the following questions by circling the appropriate number:

A) To what extent was this cause

Totally due to me	1	2	3	4	5	6	7	Totally due to other people or circumstances

B) *How likely is it that this cause will influence future events?*

Very likely	1	2	3	4	5	6	7	Not at all likely

C) How likely is it that this cause will influence a wide range of work events or areas of your life?

Very likely	1	2	3	4	5	6	7	Not at all likely

D) How much control do you have over this cause?

Totally Controllable by me	1	2	3	4	5	6	7	Not at all controllable by me

3 **Please think of another situation you were involved in at work which you think was very successful**

What was it?

What was the main cause of that incident?

Please answer the following questions by circling the appropriate number:

A) To what extent was this cause

Totally due to me	1	2	3	4	5	6	7	Totally due to other people or circumstances

B) How likely is it that this cause will influence future events?

Very likely	1	2	3	4	5	6	7	Not at all likely

C) How likely is it that this cause will influence a wide range of work events or areas of your life?

Very likely	1	2	3	4	5	6	7	Not at all likely

D) How much control do you have over this cause?

Totally Controllable by me	1	2	3	4	5	6	7	Not at all controllable by me

4 **Please think of another situation that you were involved in at work which you felt was unsuccessful**

What was it?

What was the main cause of that incident?

Please answer the following questions by circling the appropriate number:

A) To what extent was this cause

Totally due to me	1	2	3	4	5	6	7	Totally due to other people or circumstances

B) How likely is it that this cause will influence future events?

Very likely	1	2	3	4	5	6	7	Not at all likely

C) How likely is it that this cause will influence a wide range of work events or areas of your life?

Very likely	1	2	3	4	5	6	7	Not at all likely

D) How much control do you have over this cause?

Totally Controllable by me	1	2	3	4	5	6	7	Not at all controllable by me

Appendix IX

Study 3: Semi-Structured Interview Schedule

Questions are prompts. Further questions asked depending on responses of officers and issues concerning performance in training scenario.

1 How the officer felt the incident went and why

How do you think that went?

Why do you think it went that way?

2 Issues concerning procedure

What considerations did you have at that time? (and for each point in scenario)

Did you have cover?

3 Shooting behaviour

Did you fire?

Why did you/did you not fire?

Were you fired at?

Did you perceive a threat?

4 Observational skills

Did the suspect(s) say anything?

Describe the scene/suspects.

5 The law

Were your actions justified? (Proportionate, reasonable, absolutely necessary, minimum force required).

Appendix X

Study 3: Competency rating forms

Rater: Date:

Code Number: Age:

Experience in police force: Experience as firearms officer:

1 Did the officer shoot? Yes ☐ No ☐

2 If yes, how many times?

Rate the following for each scenario:

1 Communication skills

1 2 3 4 5

Very Poor Average Very Good

2 Teamwork

1 2 3 4 5

Very Poor Average Very Good

3 Cover

1 2 3 4 5

Very Poor Average Very Good

4 Decision making skills

1 2 3 4 5

Very Poor Average Very Good

5 Shooting accuracy (if a shot was fired)

1 2 3 4 5

Very Poor Average Very Good

6 Working within the law

1 2 3 4 5

Very Poor Average Very Good

7 General adherence to standard procedures

1 2 3 4 5

Very Poor Average Very Good