

AN INVESTIGATION INTO THE CAUSES, CHARACTERISTICS AND  
CONSEQUENCES OF ANGER IN THE WORKPLACE

By

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## ABSTRACT

The main aim of this research is to investigate the causes, characteristics and consequences of workplace anger and in particular to identify the factors associated with expression and suppression of anger. The research was conducted in two stages. Stage one of this exploratory study involved in-depth, semi-structured interviews with 24 participants in management and non-management positions, working within four different employment sectors: education, health, retail and wholesale. Participants were asked general questions about their experiences of anger at work, followed by more specific questions. Analysis of the data resulted in several sub-categories, sub-subcategories and themes being identified within the categories of causes, characteristics, short and long consequences of anger incidents. In addition, the analysis resulted in the development of a theoretical model on workplace anger, which acted as the starting point for the development of items for an event contingent anger diary for the second stage of the research. In stage two of the research, participants (n=187) from management and non-management positions, working within the four different employment sectors completed the event-contingent anger diary over a period of four working weeks. The context, source and gender of anger incidents were also explored. Participants also completed the self-report measures on trait anger and job satisfaction. Results show the distribution of the causes and characteristics of anger of incidents in relation to the context, source and employment sector. Furthermore, results show that working in the retail and wholesale sector were significant predictors of expressing anger, and being angered by a student/pupil was a significant predictor of expression of anger. Also, causes of anger which involved disrespect, unjust treatment, unprofessional behaviour, powerlessness, humiliation/jealousy and job incompetence were incidents which were significant predictors of expressing anger. The results also showed, that the more stressed an individual was before an anger incident, the larger the odds of expression. Also, the more an individual was satisfied with their work the more likely they were to express their anger, and the more satisfied an individual was with their coworkers the more likely they were to suppress their anger. Finally, the current research is discussed in terms of its implications for the preventions and reduction of anger at work, and suggestions for future research are proposed.

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## INTRODUCTION

### **Is workplace anger a myth or a reality?**

The media would have the public believe that anger at work is rife and that this discrete emotion is the reason for the apparent wave of killings that have taken place throughout workplaces in the U.K., particularly in the U.S.A., in recent years.

The latest massacre took place this year in St Louis, Missouri, U.S.A, when a gunman ‘stormed’ a factory in the city. The gunman turned out to be a disgruntled employee who ended up killing and injuring a number of colleagues at his workplace before finally killing himself. Apparently the killer, Mr Hendron, had been involved in a legal dispute over the firm’s management of employees’ retirement funds. The BBC (2010) reported that Mr Hendron, and other coworkers had accused their company of “causing their retirement accounts to include investment options with unreasonable and excessive fees and expenses” (*St Louis factory gunman who killed three is dead*, pg. 1). Mr Hendron had apparently felt unfairly treated over his employer’s decision to ‘short change’ him and subsequently took out his revenge on the organisation.

As a consequence of such stories in the press, new words such as ‘office rage’, ‘desk rage’ and ‘going postal’ have emerged to describe the backlash to workplace anger, and such words are often seen splashed across the front pages of our newspapers. In response to this, some anger management companies are portraying a world of work whereby anger and violence are an everyday occurrence. One online company has stated that:

...everyday, literally thousands of employees are killing and maiming each other as a result of their mis-managed and uncontrolled anger and rage. Many more thousands of ‘innocent’ by-standers /co-workers are also being hurt or killed in the process. Too many managers and bosses are losing their lives each year because of angry and violent actions of disgruntled employees. Make no mistake about it, the modern workplace of today is dangerous and becoming increasingly more violent and you can easily be hurt or even lose your life if you don’t know how to manage your anger and the anger of your co-workers (*Managing and coping with anger in the workplace*, angermgt.com, pg.1, 2002).

## **The true extent of violence at work**

Bennington (2008) believes that despite stereotypes about tragic events, not all violence in the workplace is a result of angry or disgruntled employees and in fact these tragedies represent an extremely small amount of the incidents of workplace violence. Figures show that the risk of being a victim of actual or threatened violence is low at work: the British Crime Survey (Buckley, Cookson & Packham, 2009) recently indicated that only 1.4 per cent of working adults were victims of one or more violent incidents at work.

The above figures show that the situation with regards to violence is not as bad as it initially seems. That is not to say that physical injury at work is to be accepted, but rather to highlight the point that the physical danger in the workplace from angry current or former employees is not found statistically to be a great a threat as the headlines might lead us to believe. However, Bennington (2008) warns that although all violence in the workplace may not be caused by anger and not all anger in the workplace results in physical violence, anger in the workplace is not to be taken lightly by managers and supervisors. Managers should be aware that media reports on anger and violence maybe creating myths about anger's actual nature and occurrence. This in turn may be distracting managers from the real nature and occurrences of workplace anger. Bennington (2008) continues to suggest that if managers do not realise what these realities are they can not address anger properly. Bennington (2008) states that:

the realities of anger are that it is much less likely that an angry employee will go on a killing rampage than the prevailing and costly threats of sabotage, procrastination, and other forms of aggressive and passive aggressive employee behaviour resulting from chronic and episodic employee anger (pg. 46)

## **What does the literature on emotions and anger tell us?**

### ***Emotions and discrete emotions at work***

What are workers' real experiences of anger at work? This question is currently of great importance as research has already shown that the role of emotion in the workplace is an important factor for organisational attitudes and behaviour (Ashkanasy, Hartel & Daus, 2002); however, the empirical research testing these broad proposals is

only just beginning to take place. Also, although there are a growing number of exceptions, it is the research into discrete emotions, such as anger, that seems to have been neglected the most. This is unfortunate, as anger is said to be the most commonly experienced emotion (Fitness, 2000; Grandey, Tam & Brauburger, 2002; Mann, 1999) and organisations could clearly benefit from identifying the causes, characteristics and consequences of personal anger and thus help management diagnose and change work situations before they become detrimental.

### **Different research methods**

In addition, even though the benefits of investigating anger have been brought to researchers' attention (Gibson and Callister, 2010), there have been few attempts not only to examine anger at work but also to identify specific factors associated with becoming angry at work. One reason for this is that different methods have been used to capture anger, and although these have come up with some interesting results, using different methods have produced different outcomes. In addition, using traditional survey methods to collect data on people's emotions has been notoriously problematic due to recall biases. These recall biases are believed to occur when asking people to talk about anger incidents retrospectively.

### **Different work groups**

Furthermore, studies have also been carried out on different organisational sectors, have used different sources of workers' anger (e.g. customers and coworkers) and looked at different contexts of anger incidents (i.e. subordinates and supervisors). Again these have provided remarkably different results on workers' experiences' of anger but make it difficult to generalise the results to the wider population.

### **No theoretical development of workplace anger**

The lack of research into discrete emotions such as anger, the lack of consistency with the methods used and the different samples of workers used to carry out empirical research, have all led to some interesting findings but have not led to any theory on workplace anger; in particular, any theory which involves the unfolding process of anger incidents at work (King, 2000). If such a theory existed, then it could not only

provide clues for more efficient interventions but also provide a framework for future research.

### **Affective events theory**

Despite the lack of any theory on the unfolding processes of workplace anger, one theory which has been developed to capture emotions in real time at work is Affective Events Theory (AET; Weiss & Cropanzano, 1996). This theory specifically allows emotions to be measured as they are experienced and also allows for information, such as frequency of emotions, to be aggregated across time. It has been proposed that emotions come in blends and sequences and thus anger should be examined in such a way as to capture the progression of it as it is experienced (Fitness, 2000). Thus, AET provides a suitable framework on which to build a theory of workplace anger.

### **STRUCTURE OF THE THESIS**

Therefore the aim of this thesis is to develop a theoretical model on anger in the workplace which will allow anger to be measured in real time, over time and investigate the causes, characteristics and consequences of anger.

The thesis will be in two parts. The first part, called study one: the interviews will consist of an investigation looking into the causes, characteristics and consequences of anger using one to one interviews. After analysis of the interviews a theoretical model for workplace anger will be constructed which specifically looks at the unfolding processes of anger over time and focuses on its causes, characteristics and consequences. The second part of the thesis, called study two: the anger diary will consist of the development of items for an anger diary, developed from the theoretical model, which will be used to collect data on workers' experiences of anger over a four-week period. The data collected from the anger diary, and other variables thought to be important to the study, will be used to test certain aspects of the model.

## **CHAPTER 1**

### **A REVIEW OF THE STUDY OF ANGER**

#### **1.1 OUTLINE OF CHAPTER**

This chapter will begin with a review of the study of anger at work, particularly the reasons why research into anger has been overlooked in the past. Furthermore it will offer a definition of anger, introduce the concept of state and trait anger and provide an overview of anger in general and anger at work. Following this, there will be an explanation of what is thought to be the most effective way to collect data on emotions using Experiencing Sampling Methodology and a detailed description of Affective Events Theory. Finally, an introduction to the conceptual framework, which will act as a guide to the research will be presented.

#### **1.2 A REVIEW OF THE STUDY OF EMOTIONS AT WORK**

Academics have been studying emotions in the work setting for many years; however, the surge of academic research specifically on emotions in the workplace is relatively recent (Fitness, 2000). In fact, it has only been since the late 1980s and 1990s that the shift of examining mood and emotions has moved solidly into the organisational and workplace settings (Ashkanasy et al. 2002).

##### **1.2.1 Clustering emotions**

In the past, the dominant research on emotions at work had tended to concentrate on clustering emotions together using different approaches (Lazarus & Cohen-Charash, 2001, as cited in Payne & Cooper, 2001). One such approach is the dimensional approach (Russell, 1980, as cited in Payne & Cooper, 2001) i.e. a factor analytic attempt to identify the minimum number of dimensions that can account for the greatest amount of emotion variance. Although this approach has provided considerable insights into how emotions affect moods, attitudes and behaviour at work, researchers have argued that not enough attention is given to discrete emotions. Furthermore, given that each emotion has its own story line or plot, lumping together emotions is not an appropriate



research strategy. Lazarus and Cohen-Charash, (2001, as cited in Payne & Cooper, 2001) have thus stated that:

If the dominant emotion is anger, we are dealing with a different kind of recurring adaptation drama than would be the case if the dominant emotion were, say, anxiety, guilt, shame, envy, jealousy and so forth (pg. 52).

Therefore, knowing about a particular emotion and how it is aroused, its dynamics and its consequences, may be essential for diagnosing it and managing it effectively, as opposed to clustering emotions together into different dimensions. In fact, research on emotional labour has provided much of the evidence to show that discrete emotions are being experienced at work and that they are worthy of investigation in their own right.

### **1.2.2 Emotional labour**

The starting point for modern research on emotions in organisations seems to have been sociologist Hochschild's (1983) seminal book on emotional labour: *The Managed Heart*. The publication of *The Managed Heart* (Hochschild, 1983) represented one of the earliest examples of research into emotions in organisational settings. In particular, this publication introduced the construct of emotional labour. Emotional labour will be discussed in greater detail later in chapter 2: section 2.6; however it will be briefly mentioned here for the purpose of describing how anger was identified as being an important discrete emotion to investigate.

### **1.2.3 What is emotional labour?**

Many work interactions require employees to control their behaviour and the display of their emotions (Hochschild, 1983). The requirement to display specific emotions in front of customers (or clients, patients, students, etc.), and to manage one's own emotions to achieve the required display, has been described as emotional labour (Tschan, Rochat & Zapf, 2005).

#### ***The requirement to express positive emotion***

It is said that in the work context employees typically need to suppress negative emotions and express positive emotions, especially with interactions with customers. For example, employees are expected to be friendly to customers in a variety of

occupations, as it has been argued that friendly employees can attract customers and encourage them to spend more money (Rafaeli & Sutton, 1989). Furthermore, successful management of emotion at work has shown to be related to continued positive outcomes for the organisation, such as, customer retention and improved customer service (Holman, Chissick & Totterdell (2002). In addition, expressing positive and suppressing negative emotions has been associated with customer loyalty and satisfaction whereas revealing negative emotions to customers is related to lower customer encounter satisfaction (Ashkanasy et al. 2002; Grandey et al. 2002). Thus there appears to be many benefits to the organisation for expressing positive emotions as opposed to negative emotions.

### ***The requirement to suppress negative emotion***

Although the display of negative emotions is part of the job requirement in some occupations (Mann, 1999), for example, creditors and debt collectors, it seems apparent that emotions that are not required in a job role, such as negative emotions, have received less attention. Glomb and Hulin (1997) propose that this is due to the “taboo on coarse emotions” (pg. 282) that makes the display of emotions, such as anger, less available for study. Thus, it could be argued that research on emotions has tended to focus on the expression of positive emotions as requirements in an occupation (Rafaeli & Sutton, 1987; Rafaeli & Sutton 1989) as these are more readily available to study, and in doing so neglected negative emotions.

Yet, studies on emotional labour have shown that employees are frequently suppressing negative emotion. Mann (1999) reported that in 60% of all communications that were monitored at work, people hid emotion, with anger being the most commonly suppressed emotion. In support of these findings, Grandey et al. (2002) found that faking emotion was related to the experience of anger at work and workers tended to fake positive emotions while suppressing feelings of anger. Unfortunately, suppressing emotions, and faking emotions that employees do not feel may lead to a whole series of negative consequences for employees’ mental and physical health and can result eventually in dysfunctional behaviour (Hochschild 1983; Mann, 1999).

Thus, somewhat differently from research on clustering emotions, emotional labour has tended to focus on discrete emotions. As such, it is seen as a first step in recognizing

the importance of discrete emotions, or rather it makes use of discrete emotions to help explain the phenomenon of emotional labour, and in doing so has highlighted that individuals are suppressing the emotion of anger in particular, while at the same time trying to fake positive emotion.

### **1.3 DEFINITIONS OF ANGER**

Russell and Fehr (1994) state that not only is the concept of emotion said to be fuzzy but so too is the concept of anger. With regards to anger, Russell and Fehr (1994) further add that “we assume that what we know is a classical definition, although implicit. The first hint of a problem comes when writers attempt to make this assumed knowledge explicit” (page 187).

In reviewing the literature, it was found that the term ‘anger’ has a variety of meanings in psychology. For example, Berkowitz (1999) refers to anger as an experience of feeling, internal bodily reactions, and an attitude toward others, instigation to aggression, and an overt assault on some target and to various combinations of these reactions. There most certainly is a belief that anger has to contain, cognitive, behavioural and physiological responses to be correctly defined as anger. Furthermore, although it is said to be instigation to aggression, it has been distinguished from aggression and the related concept of hostility (Sukhodolsky, Golub & Cromwell, 2001).

One of the most comprehensible descriptions of anger however is that offered by Dahlen & Daffenbacher (2001) who state that anger is an “an internal, experiential state” (pg. 165) that includes four related domains: a) emotional/experiential anger, which is a feeling state that ranges in intensity from mild annoyance to rage and fury; b) physiological arousal, which is said to be anger which is accompanied by adrenal release, increased muscle tension and activation of the sympathetic nervous system; c) cognitive processes, which involves biased information processing and d) behaviour, such that behaviourally, anger may be expressed in a variety of functional or dysfunctional ways. Dahlen and Deffenbacher (2001) claim that all four domains can “co-occur and interact with each other such that they are often experienced as a single phenomenon” (pg 165).

### **1.3.1 State and trait anger**

In addition to the above description of anger there are two types of anger: state and trait anger (Spielberger & London, 1982). State anger, is defined as a transient psychobiological feeling that varies in intensity from mild irritation to fury and involves the simultaneous activation of the automatic nervous system. Correspondingly, an individual's tendency to experience state anger with higher frequency, and in response to a wider range of situations, is referred to as trait-anger and Gustavsson, Pedersen, Asberg & Schalling (1996) claim that "it [trait anger] reflects individual differences in the ease, frequency and intensity of becoming angered (pg. 1067).

## **1.4 THE NATURE OF ANGER IN GENERAL**

### **1.4.1 Good anger**

Averill (1982) has claimed that anger is a common emotion and that when mild, serves many positive functions, such as signalling dissatisfaction, motivating corrective action and energising adaptive coping behaviour. Fitness (2008) also proposes that anger energises and motivates the angry person to take constructive efforts to change an unjust situation thereby serving as a positive social function and helping to regulate interpersonal relations. Anger can be expressed in a great variety of ways. The common assumption is that the fundamental response tendency during anger is to strike out or to engage in some form of physical response. However it has been recognised that anger does not always result in physical aggression and this is the result of social adjustment. In order to meet social and ethical standards "we learn to respond to anger with words and with enough tact to keep from angering the other person and cutting off communication (Izard, 1977 as cited in Averill, 1982).

### **1.4.2 Bad anger**

Nonetheless, when individuals experience intense anger or individuals express it in dysfunctional ways, anger can present serious problems. As Dahlen and Deffenbacher, (2001) have stated, experiencing anger in such a way, has been related to significant impairment across many areas of functioning, such as reduced social support, relationship difficulties, alcohol abuse, verbal and physical aggression, coping deficits,

stress and burnout at work and numerous health problems such as hypertension and coronary heart disease. Furthermore, anger, hostility, depression and low levels of social support or social isolation have been reported to travel together in the same individuals (Williams & Williams, 1998). Thus it is important that researchers and managers are aware about the extent of anger at work and are also informed about effective treatments for angry individuals.

## **1.5 ANGER AT WORK**

The finding that anger is being experienced at work, if not always expressed, may not be such a revelation for researchers. It is said that the workplace has been identified as one of the most interpersonally frustrating contexts that people have to deal with. Therefore, it might be expected that workers, in particular, will frequently experience anger. (Fitness, 2002; Gibson & Barsade, 1999; Glomb & Hulin, 1997; Grandy et al. 2002).

Gibson and Barsade (1999) recently reported that almost half of all workers felt 'a little angry' at work and almost a quarter felt chronically angry. Furthermore, Grandey et al. (2002) found that over a two-week period, participants at work, who in total recorded 168 anger events, experienced 42% 'higher anger' events, that is, intense anger events. This highlights the point that anger may not only be experienced frequently at work but that when it is experienced it is long lasting and intensely felt.

Such findings may be a cause for concern as experiencing anger has not only been implicated to somatic problems and health concerns for the individual experiencing the anger but more specifically to negative outcomes in the workplace; for example, theft, revenge and even, although rarely found, violence and aggression (Deffenbacher et al.; 1996; Fitness, 2000). Therefore, experiencing anger can not only have damaging effects on an individual's health but also have negative effects on the organisation, with regards to turnover, output and productivity. It would thus be beneficial for both parties if anger could be managed in an appropriate way. To date, however, there is still relatively little known about workplace anger and what the antecedents and outcomes of it are, its relation to other organisational outcomes or constituent emotions. Furthermore, the limited research on anger at work has not allowed for any theoretical

developments on the causes, characteristics and consequences of anger in the workplace.

## **1.6 PROBLEMS CONCERNING METHODOLOGY**

### **1.6.1 Recall bias on anger incidents**

Issues regarding the lack of theory and data have recently been blamed on the lack of methods available to measure anger at work (Fitness, 2000; Grandey et al., 2002; Miner, Glomb & Hulin 2005). Most studies assessing the causes and effects of anger at work have used static cross sectional designs and retrospective accounts of personal anger (see Fitness, 2000; Fox & Spector, 1999; Gibson & Barsade, 1999).

Fitness (2000) obtained descriptions from employees about their experiences of workplace anger by using an emotion script approach (i.e. the process of extracting and categorizing prototypical features of employees' accounts of their experiences of workplace anger) to examine causes of anger. Although this study provided some very interesting findings (see chapter 2: section 2.11.2) it used retrospective data, therefore, the emotion scripts could have been contaminated by memory bias. As Fisher (2002b) proposes, anger like any other emotion is said to be variable and transient and may be difficult to recall accurately long after it has occurred.

Wheeler and Reis (1991) also believe that information on emotions gathered using global questionnaires possess "significant distortions" (pg 344) due to the belief that accuracy of recall when using such measures could be biased. Fisher (2005) has also proposed that there is a great deal of evidence that autobiographical recall, even of specific factual events is far from perfect. Fisher (2005) states that people systematically over-estimate the frequency and intensity with which they have experienced both positive and negative moods and emotions when reporting retrospectively compared to the aggregate of multiple real time reports during the same time period.

In addition, where it was once thought that time lags in self-reporting led simply to memory decay, studies have now shown that forgetting is not random (Kubey, Larson & Csikszentmihalyi, 1996). Events distant in time and those that participants deem less

salient to the assessment are less likely to be reported. Recall of information is said to depend on the heuristics of the situation and the questions that participants are asked, as well as the participants' frame of mind and mood, all of which can systematically bias recall in ways that are likely to interact with the phenomena under study.

A related finding is that participants, at least when reflecting on pain, tend to rely on a 'peak end' rule, giving more weight to the peak levels, and to the most recent levels of experience rather than equally weighting each instance (Radelmeier & Kahneman, 1996 cited in Bolger, Davis & Rafaeli, 2003). Thus organisations, which use retrospective reporting, may not be presenting an accurate picture of what is truly happening within that organisation, especially with regard to the experience of emotions and its frequency, intensity and duration. Conducting studies using one-time measures to gather information on emotions experienced at work, could produce faulty reconstruction of the phenomena of interest. Only by using more accurate methods and measures can the correct information be gathered on emotion, so that prevention and training can be implemented in a precise manner.

## **1.7 EXPERIENCE SAMPLING METHODOLOGY**

One way to try and measure anger more accurately would be to use Experience Sampling Methodology (ESM). Such methods involve the in-depth study of everyday experiences and on-going behaviour in their natural environment (Alliger & Williams, 1993). Assessment, such as that used in ESM, can substantially reduce the biases that attend retrospective recall over extended time intervals. Furthermore, by collecting data within the context to which they refer, substantially increases the ecological validity of the study (Kubey, Larson & Csikszentmihalyi, 1996).

### **1.7.1 How ESM is carried out by the participant?**

Participants are asked to complete self-reports as they go about their everyday activities. Completing self-reports can take place over the course of a week or a month or whatever time is determined by the researcher. For example, each time participants experience an anger incident they would be asked to complete a page in a self-report booklet with the aim of trying to report on their subjective experience immediately.

It has been suggested that the self-report forms should typically take less than two minutes to complete (Kubey et al. 1996): the aim of which would be to keep any intrusion into the participant' daily activities to a minimum. This way, variables can be observed dynamically instead of statically, and in real time rather than recalled; thus participants do not have to do the cognitive work of aggregating, summarising and recalling past psychological or behavioural states (Miner, Glomb & Hulin, 2001).

Thus, with ESM, participants can do the self-reporting in their own time at their own convenience, subject to some experimenter-imposed constraints (Montgomery & Duck, 1991), and participants can report what is felt while it is still 'hot'. Furthermore, Montgomery and Duck (1991) point out that no invasive measurement techniques are involved, the participants' activities or interactions are not interrupted, and participants are not observed by anyone external to their activities or interactions while it is occurring.

### **1.7.2 Diary studies using three different methods: interval, signal and event contingent recording**

ESM using diaries are one method which enable the collection of data from participants while they are in their natural setting and while the information which they are being asked about is still fresh in their minds (Bolger et al. 2003; Wheeler & Reis, 1991). This method will be used in the second part of this study, study two: the anger diaries in order to collect data on anger incidents. Hence it will be described in detail as follows.

With diaries, participants are able to record information about events in a fixed format, thus measuring experiences as they happen. They also provide an accurate record of that experience reducing the likelihood of retrospection, achieved by minimising the amount of time elapsed between the experience and the account of the experience. Three methods are in current use for collecting self-reports on events: interval and signal contingent designs, which are called time-based designs, and event contingent designs which are called event-based designs. Wheeler and Reis (1991) have provided explanations of the three designs and these will be described below.



### ***Interval contingent design***

Interval contingent designs involve participants recording their experiences at regular intervals. Normally, the researcher determines when these times will be and is interested in what has happened between each interval, as well as what a person is feeling at that given moment. However, a disadvantage of such methods is that the recording is likely to be removed in time from the event in question thus creating retrospective bias, which is exactly what diary studies aim to eliminate.

### ***Signal contingent recording***

Signal contingent designs require participants to describe their experiences whenever they are signalled, usually by an alarm or bleeper, which can be fixed or random or both. However, such designs are not very useful for events which are uncommon. Furthermore, the use of signalling devices can be particularly intrusive to participants.

### ***Event contingent recording***

Event-based designs require participants to report on an event, defined by the researcher, each time it occurs (Bolger et al. 1993). Such techniques do not require alarms or beepers and participants can record information about the event without anyone else even knowing about it. This design enables the assessment of specific occurrences of a phenomenon, such as anger, that would not necessarily be captured by fixed or random interval assessments. However, definitions of events have to be clearly defined to participants and reports on events must be reported as soon as possible after the event to prevent retrospective bias.

### **1.7.3. Advantages and disadvantages of ESM**

There are many advantages to ESM, for example, it is said to provide better estimates of frequency, distribution and intensity of psychological variables than cross-sectional designs because memory effects should be minimised and it provides a better understanding of the temporal and dynamic nature of the work experience (Miner, Glomb & Hulin, 2005). It can provide researchers with ways in which to measure the duration and intensity of emotional reactions to varying work conditions and investigate

how these reactions may influence later experiences and behaviour. In addition, data collected using ESM can be accessed repeatedly, as Kubey et al. (1996) state, ESM can provide an “unparallel wealth of data...that can be accessed over and over again to test any number of hypotheses formulated at the time of collection or 20 years later” (pg. 127). Nonetheless, there are disadvantages to using ESM, which may compromise a study if the researcher is not aware of them. These are mentioned below and each one will be addressed in the present study.

### *Intrusiveness*

Intrusiveness (Alliger & Williams, 1993) is said to be a main concern with ESM. Participants may be deterred from taking part in the study, or continuing with a study, if they have to repeatedly fill out self report forms. However, this may be offset if the study and procedures are fully explained to the participants. Thus, participants must understand the objectives of the study and must believe they are an important part of the research effort, particularly if they are to feel motivated to complete questionnaires repeatedly on their activities and experiences of their everyday life.

### *Self selection bias*

Self selection bias (Alliger & Williams, 1993) may result whereby certain types of individuals are over represented or underrepresented, and this may tend to happen more so in time and event-sampling studies than in a traditional study. Using ESM does put high demands on participants and research has found that in such high-demand studies participants who take part tend to be psychologically healthier and a better adjusted group than people who do not take part (Waite, Claffey & Hillbrand, 1998). This latter group tend to be more anxious and do not volunteer as they see the high-demands of the study as a stressor which may add to their anxiety.

In addition, people who think that they will be favourably evaluated by the researcher are more likely to take part in the study than those people who think they will be negatively evaluated (Waite et al. 1998). Again, this latter group, who may be less psychologically healthy, may not wish to reveal their feelings and behaviours using ESM. So, even if such people do take part, their responses may be greatly influenced by the demands of the methods. Thus, in order to encourage a wider sample of the

population to take part in the study, the study should be described in a non threatening manner and participants should be made aware that the information gathered will be held in the strictest confidence.

Also, it has been suggested (Waite et al. 1998) that particular attention should be paid to people with unusual or long work schedules and also to people who have family commitments. These groups of people may not be available at the time of recruitment in such studies or feel unable to take part because of their other commitments, which in turn could bias the results of studies. In order to reduce such biases it is proposed that the researcher should try to include persons who may not normally take part in such studies. Therefore Waite et al. (1998) suggests that researchers should try to limit the time demand of the study as much as possible and schedule testing sessions across a variety of times.

### ***Reactance and habituation.***

Reactance refers to a change in participants' experiences or behaviours as a result of participation in a study (Alliger & Williams, 1993; Miner, Glomb & Hulin, 2001; Wheeler & Reis, 1991). At present there is little evidence that reactance poses a threat to diaries' validity, and it has actually been argued that reactivity is less likely in diary studies because of a habituation process (Bolger et al. 2003); that is, participants become so familiar with filling out the diary that it does not have an effect on their behaviour. On the other hand, habituation, and more specifically the development of a habitual style when making diary entries, may have some deleterious effects. For example, participants may develop a tendency to skim over sections of a diary questionnaire that rarely applies to their experience and may omit responses even at relevant times. Alliger and Williams (1993) suggest a variation in the presentation of questions so as to prevent participants from becoming sensitised to experiences of behaviours.

### ***Participant cooperation***

Alliger and Williams (1993) report that signal contingent studies have reported around an 85% response rate in all, and that 90% of these responses occur within 5 minutes of the signal. These figures are similar to those reported by Miner et al. (2001) who state

that participants in their study tended to complete questionnaires about 75%-80% of the time after being signalled. Many participants (40%) claimed they were being too busy if they did not complete a questionnaire. Compliance (Bolger et al. 2005) is said to be based on the participants' trust that the study is important and worthwhile and therefore stressing this to participants prior to taking part in the study is of utmost importance.

### *The importance of maintaining good rapport with participants*

Larson and Csikszentmihalyi (1983, cited in Miner et al. 2001) also suggest that it is important that the researcher creates a research alliance with the participant. Ongoing contact with participants, in a personal yet non intrusive manner, is advised through the diary keeping period by carrying out regular informal visits to the organisation within which the participants work or keeping regular contacts with participants via email or a brief letter. Although diary studies are time consuming, this personal contact is said to retain participants more so than incentives or dependence on goodwill towards the project itself (Bolger et al. 2003).

## **1.8 COMBINING ESM AND TRADITIONAL MEASURES**

ESM research does not preclude or replace the use of other methods, in fact, ESM techniques can be coupled with other methods and approaches wherever necessary to enhance research findings (Alliger & Williams 1996; Kubey et al. 1996). In such a way, researchers can examine specific features of work and also global features too. As Alliger and Williams (1996) state, both instantaneous and long-term assessments of work variables are thought to be meaningful and participants could fill out standard questionnaires that collect data on demographics and psychological and personality inventories as well as using measures from these inventories against ESM data. For example, Kubey et al. (1996) described how researchers combined methods to assist in research which explored communication correlates of worker satisfaction. The aim was to find out whether workers who spend more time each day talking on the phone with family or friends feel better and concentrate more on work or are more productive than those who use the phone less frequently for such contact or who are not permitted to use the phone. In addition, Alliger and Williams (1996) describe how the immediate reaction to a stressor, measured by ESM, can determine immediate stress reactions and

short-term coping strategies, while global assessments measured by survey instruments, may be related to long-term coping strategies and psychological readjustment to work.

### **1.8.1 A model of experience and time**

Such studies follow the macro structure of Alliger and William's (1996) model of experience and time. They propose that one way to think about the nature of human experience and time is to think of three levels of experience which vary relative to time. The first level is the immediate time frame which involves asking participants about their present behaviour and feelings; this would represent an attempt to tap experiences at the first immediate level. The second level is called the first consolidation or short-term judgement level. At this level, a person is asked to report on affects, cognitions and events over a moderately short period of time, possibly at the end of the working day. Finally there are more global long-term judgements which represent a second consolidation of experience. At this level, measures of disposition, opinion, attitudes and affect can be taken, as these attributes are presumed to be stable across time.

Alliger and Williams (1996) do stress that with the levels of experience (immediate, short-term and long-term) causality should not be assumed to be only one way: immediate to short-term, short-term to long-term, and propose that dispositions and global judgements and cognitions may affect immediate experience and short-term perspectives on that experience. Therefore, not only do immediate experiences affect short-term judgement, these in turn affect long-term judgements; this is what Alliger and Williams (1996) call a presumed recursion in the model, and short-term and global consolidations of immediate experience feed back to and affect the reporting of immediate experience.

## **1.9 RATIONALE FOR CHOOSING AN EVENT-BASED DESIGN**

Miner, Glomb and Hulin, (2005) propose that the choice of event, interval or signal contingent sampling is be determined primarily by the theoretical question of interest; however, the organisational context must be considered as well. Thus, the sampling methods must be conducive to being carried out in a variety of settings in the workplace.

Time based signals, whether random or fixed, are likely to miss many discrete events, such as anger incidents, even those that occur numerous times each day (Bolger et al. 2003). However, both signal and event contingent methods require participants to record their experiences immediately after the signal or event, which help to reduce the likelihood that the participant will forget information on the event.

However, based on the premise that a signal contingent approach may be too intrusive, and that recall biases of anger incidents may exist with interval contingent methods, event contingent methods were chosen for part two of this study: the anger diaries. This will allow the researcher to examine the prevalence of workplace anger and the relationship between anger and other workplace variables. Hence, this research will seek to expand upon past research that has shown that anger, measured cross sectionally, relates to important workplace variables.

In addition, the researcher will follow the structure of Alliger and William's (1996) experience and time model. Hence, a diary will be used to gather information on anger incidents at the immediate level, followed by collecting data on people's assessment of how the anger incident affected their feelings about their job at the short-term level, and finally using traditional measures to assess peoples' trait anger and job satisfaction at the long-term level. This way, as Kubey et al. (1996) propose, specific and global features can be measured which will help to understand if trait anger and job satisfaction are related to anger incidents.

## **1.10 PRESENT STUDY**

Moving away from the topic of ESM, the next part of the chapter will deal with the development of the conceptual framework. As previously mentioned in the introduction, the first part of the study will involve gathering information on participants' experiences of anger at work in order to build a theoretical model of workplace. However, due to the limited amount of research on anger at work, this study is beyond doubt exploratory and the starting point for such research can be complex. One way to approach such a task is to develop a conceptual framework. Such a framework not only acts as a defence against 'overload' when investigating a new area but also enables the researcher to be selective about what will be included in the exploratory study (Miles & Hubermann, 1994). It will guide the researcher not only in

the current study, study one: the interviews, but also in the second part of the study, study two: the anger diary.

The conceptual framework and current research was partially inspired by Affective Events Theory (AET); a theory recently developed to aid researchers in investigating emotions at work (Weiss & Cropanzano, 1996). As mentioned, this theory specifically allows emotions to be measured as they are experienced and also allows for emotions to be aggregated across time. A description of the theory follows.

### 1.11 AFFECTIVE EVENTS THEORY

AET (see figure 1) focuses on the structure, causes and consequences of affective experiences at work, examining the antecedents of employees' experiences of work events and the affective, attitudinal and behavioural reactions to these events. AET is concerned with the way people feel while working. The theory includes both mood and emotions under the rubric of affective work events (Fisher, 2002b). However, in this study only the emotional dimension will be investigated; specifically anger. AET is illustrated in figure 1 below.

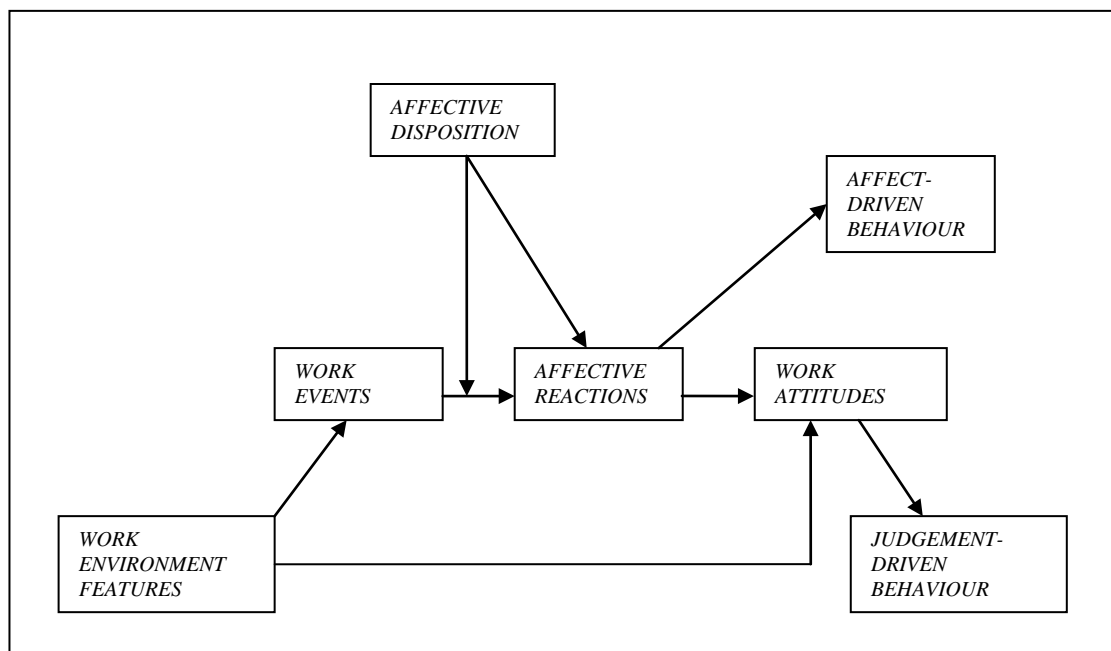


Figure 1: Affective Events Theory. Source: Weiss and Cropanzano (1996)

Fisher (2002b) provides an example of how the theory relates to experiencing mood and emotions at work. Firstly, stable *work environment features*, such as job and role

characteristics, operate by influencing the more or less frequent occurrence of real-time *work events*, and these discrete events are the causes of momentary positive or negative moods and emotions (*affective reactions*). In turn, cumulative experiences of momentary positive and negative feelings while working influences *work attitudes*. *Work environment features* may affect *work attitudes* directly through judgement driven processes as well as indirectly through their effect on *work events* and *affective reactions*. Secondly, AET also suggests that *dispositional affectivity* influences momentary or state affect and that the impact of *affective disposition*<sup>1</sup> on *work attitudes* is largely mediated through affective state affect. Finally, AET proposes that some behaviour is directly driven by impulsive feelings (*affective-driven behaviour*) rather than by *work attitudes*. Other types of behaviour (*judgement/cognitive-driven behaviour*), may be a consequence of more carefully considered judgements, which are believed to be informed by relatively stable attitudes, such as measures of job satisfaction.

### ***Example of AET at work***

Fisher (2002a) also provides a useful example of how AET relates to the workplace. The discrete event of encountering a faulty photocopier at 9:50 in the morning while rushing to prepare a 10:00 lecture may cause Brian, the lecturer, to feel angry for a moment. AET suggests that stable *work environment features* influence the occurrence of different types of *work events*. For instance, an understaffed workplace may more frequently lead to minor stressful events. In addition, individual differences in *trait affectivity* may influence momentary affect (*affective reactions*); thus, if Brian is high in dispositional positive affectivity he may be especially responsive to potential pleasing events in the work environment, and the reverse can be said if he is high in negative affectivity. Momentary affect may influence momentary behaviour real time (*affective driven behaviour*). For instance, Brian may snap at the office secretary while frustrated or angry with the photocopier (*affect driven behaviour*). Eventually, over time, a succession of momentary affective experiences (becoming angry everyday) may cumulate to influence Brian's *job attitudes*, such as, job satisfaction. Finally, as AET

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<sup>1</sup> Affective disposition is often measured as positive affectivity (PA) and negative affectivity (NA). Positive affectivity at the trait-level reflects a generally positive outlook on life. Such individuals are said to be prone to report more positive emotions in response to work than those lower in PA. Negative affectivity (NA) is defined as having a negative outlook on life and this negative outlook may be associated with the experience of negative emotions over time.



suggests, some behaviours are *judgement-driven* by *job attitudes* rather than being directly influenced by current behaviours; thus Brian may eventually decide to quit his job.

Researchers have found strong support for the AET. For example, Fisher (2002b) employed ESM over a two week period and found that perceived job characteristics (work environment features) such as, task identity, skill variety, task significance, autonomy and feedback predicted positive affective reactions while role conflict predicted negative affective reactions. Also, dispositional positive affectivity predicted positive affective reactions. Furthermore, Fisher (2002b) found that job characteristics separately predicted job satisfaction, and that affective commitment, (“an emotional attachment to, identification with and involvement in the organisation” Meyer & Allen, 1991, pg. 67 cited in Fisher, pg 11, 2002b) was influenced by job characteristics and positive affective reactions. Furthermore, affective commitment and job satisfaction predicted intention to leave. Finally, the results showed that positive affective reactions were predictive of helping behaviour, an affect driven behaviour whereas job satisfaction and affective commitment did not predict helping behaviour. This shows that affective reactions have an immediate effect on certain behaviours while attitudes, which are affected by an accumulation of affective reactions, have effects on other kinds of behaviours.

### **1.11.2 What does AET tell us?**

Ashkanasy et al. (2002) claim, that AET carries two vital and different messages of importance to management and organisational behaviour researchers. The first message is that emotions in organisations and the events that cause them are not to be ignored, even if they appear to be relatively minor. The sorts of events that generate negative emotions not only include interactions with customers, patients and students (i.e. people external to the organisation) but also interactions with supervisors, coworkers and subordinates (i.e. people internal to the organisation), and these events can have a cumulative nature. Furthermore, Ashkanasy et al. (2002) claim that it is not the intensity of these events that leads to affective states, but more the frequency with which they occur. As a result people at work may be capable of dealing with infrequent occurrences, even when these are relatively intense; however, the situation may become worse if there is an unremitting series of negative events. In effect, AET proposes that it

is the accumulation of negative events that determines how workers feel, and that according to AET subsequently determines the way workers think and feel at work. Nonetheless, Ashkansy et al. (2002) do propose that the deleterious effects of negative affect can be avoided if support is provided by friends and family following an event. The second important message of AET is that emotions may constitute a critical link between workplace contexts and employee behaviour. That is, affect mediates the effect of organisational variables on affective and behavioural outcomes.

### *Summary of AET*

AET has, for the first time, allowed researchers to base their theoretical and empirical research on a logical framework; especially with regards to measuring emotions at work in real time and across time (Ashkanasy et al. 2002). One way to measure emotions in real time is to use ESM. Although there have been attempts to measure emotions using ESM there have been no attempts to measure anger in a systematic way, as it occurs in its natural environment using such procedures. This exploratory study will also use AET as a guiding framework for this current research and the later development of the researcher's own theoretical model.

## **1.12 CONCEPTUAL FRAMEWORK FOR THE CURRENT STUDY**

After an extensive review of the literature, a conceptual framework was formulated by the researcher (see figure 2). The topics chosen to be included in the framework were influenced by studies already carried out on research into anger, which provided evidence to suggest that variables would possibly have an effect on anger incidents at work. These are mentioned in the following chapter (see chapter 2).

The framework in figure 2 follows the macro structure of AET by proposing that emotions help explain the effects of work events on immediate behaviour, attitudes and subsequent behaviour and that work environment features can influence the occurrence of work events while dispositional characteristics can influence emotional reactions. However, this model differs by including constituent emotions to represent the additional effects of cognitions on employees' responses. Source, context, employment sector and gender have also been added to the model as it is thought likely that anger incidents will be influenced by these factors. Hence, the resulting framework proposes

that certain work environment features influence the occurrence of work events, which depending on an employee's dispositional characteristics, will influence affective reactions directly and attitudes and cognitive responses indirectly via constituent emotions. The initial work event that triggers the process is influenced by work environment features, the source of the anger (i.e. internal or external), the context of the event (i.e. power differences), the organisation (i.e. employment sector) the events take place in and the gender of the angry person. Affect driven behaviour is influenced by the angry reaction. As the anger process unfolds, constituent emotions influence employees' perception of the incident and subsequent attitudes towards work, which, in turn, leads to judgement driven behaviours.

### **1.13 CHAPTER SUMMARY**

One of the main aims of this research is to develop a theoretical model on workplace anger and test some of the main concepts within the model. This theoretical model which is based on AET, will allow anger to be captured in real time over time, so that the extent of anger at work can be more accurately measured and the results can be applied to a wider range of the workforce. The starting point for such a project is to build a conceptual framework based on AET and previous research. Despite the limited research on discrete emotions, anger has probably received the most attention and although this is limited too, it has at least been studied in a number of contexts and started to provide vital information for researchers exploring this area. Therefore, in the next chapter a conceptual framework will be presented which will act as a starting point for the research in this study. A description of what are thought to be the most important facets concerned with anger at work, which have been taken from the existing literature, are included in the frame work and will also be discussed in greater detail below.

## CHAPTER 2

### DEVELOPMENT OF THE CONCEPTUAL FRAMEWORK

#### 2.1 OUTLINE OF CHAPTER

This next chapter describes how the conceptual framework was built. It includes explanations of the main concepts within the framework, the causes, characteristics and consequences of anger at work and other organisational variables thought to influence workers' experience of anger.

#### 2.2 TERMINOLOGY

Agents, angry persons, offenders and targets are different terms that have been used to describe the person who becomes angry in studies and the person who creates that anger (Averill, 1983; Gibson & Callister, 2010). The titles given to people in this study are as follows. Individuals experiencing anger will be referred to as *the angry person*; individuals who are perceived to be the instigator of anger incidents as *offenders*; and people who have do not have anything to do with the anger incident and may or may not be present at the time of the incident as *others*.

#### 2.3 CONCEPTUAL FRAMEWORK

The names of each box in the conceptual framework (see figure 2) has been changed to reflect the factors that are being investigated in the current research (the names in italics reflect those belonging to the original Affective Events Theory). The framework is not strictly causal, in which each 'input' always produces the same 'output': rather it should be considered as a generic framework, mapping out, how individual and structural factors may be associated with anger.

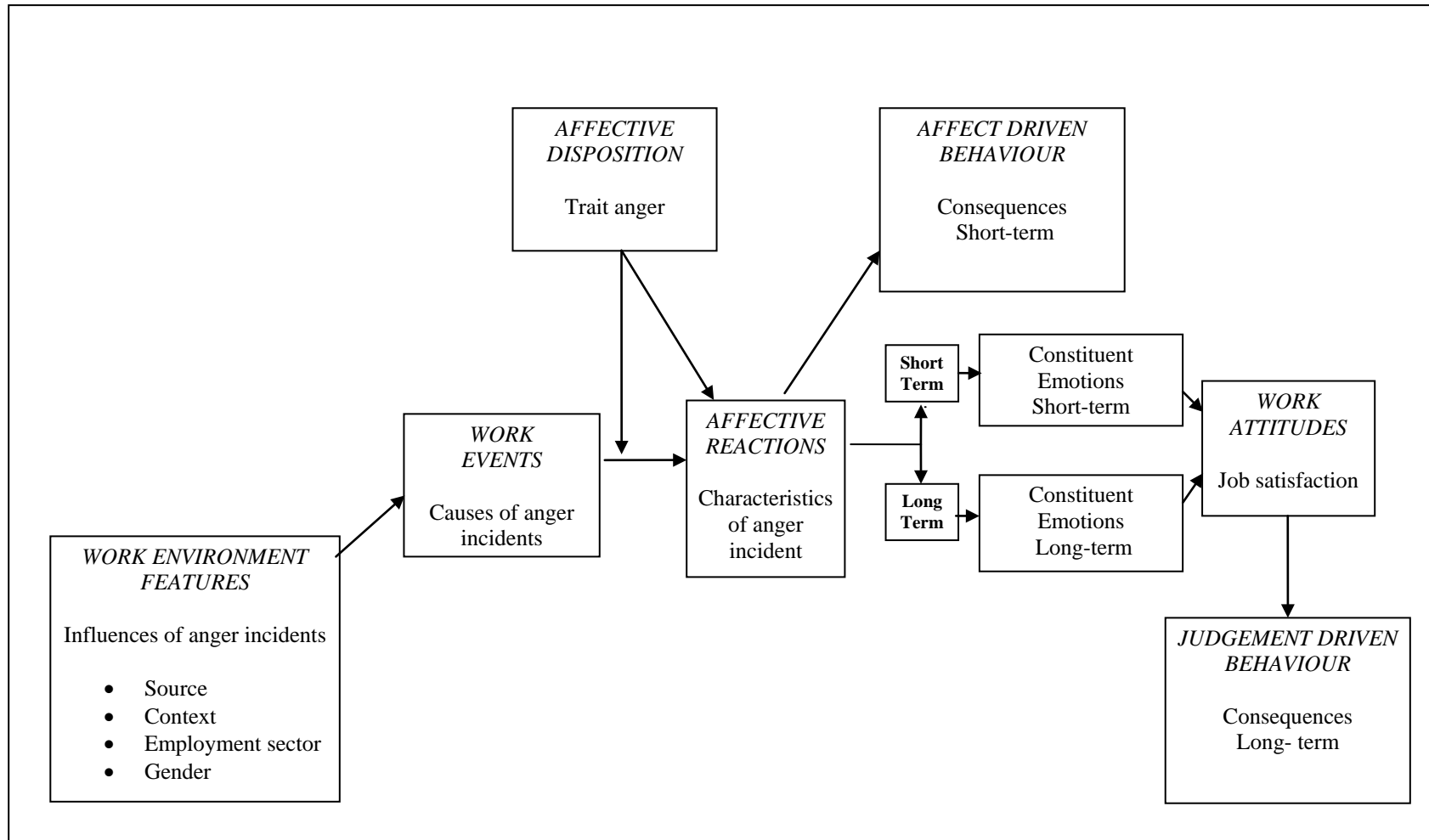


Figure 2: Conceptual framework used to guide the research for the overall study

### ***Rationale for incorporating key aspects in the framework***

The causes, the characteristics and consequences of anger incidents (including the immediate and later feelings and behaviour of people experiencing anger incidents) will be investigated for the first stage of the research, study one: the interviews, and are mentioned below. Furthermore, incident resolved and social support, are two other factors which will be investigated in study one: the interviews; however without further research it is not known at present their place in the framework.

In addition, the sources of anger incidents, the context of anger incidents, the employment sectors in which anger incidents are experienced, gender differences in anger incident, influences of anger incidents, trait anger and job satisfaction will be examined, but this will take place at the second stage of the research, study two: the anger diaries. However, they will also be mentioned below as they are part of the conceptual framework.

## **2.4 CAUSES OF ANGER**

*Anyone can become angry - that is easy. But to be angry with the right person, to the right degree, at the right time, for the right purpose and in the right way – that is not easy*

*(Aristotle)*

### **2.4.1 What events are happening to cause anger?**

The central tenet of AET proposes that affective events cause affective reactions. In the current research, it is proposed that anger events cause angry reactions. However, although research has started to provide some interesting results as to the causes of anger, more information is needed about the types of events that are causing people to become angry.

Several different approaches have been used to study anger at work in recent years. Fitness (2000) used workers' descriptions of anger (emotion scripts) to examine the causes of anger at work. The main causes of anger identified in Fitness' (2000) study were: unjust treatment (i.e. a request denied, being falsely accused of lying or stealing,

being accused of poor performance, being criticised and given an onerous workload); others acting in a morally reprehensible way (i.e. being lazy, dishonest, telling lies, taking advantage of others, engaging in sexual relationships with others at work, and violation of important work rules); others' job incompetence (i.e. events that hampered the participants' ability to get the job done and unintentional mistakes); others arrogance or disrespectfulness and being humiliated.

Allcorn (1994) reported similar findings, and proposed that the origins of anger are perceived threat, humiliation, injustice, and frustration. Furthermore, a diary study carried out by Grandey et al. (2002) reported personal attack (i.e. perceived malicious intent); others' incivility (i.e. rudeness or thoughtlessness); someone interfering with a worker's work related goal and finally, issues regarding policy/structure difficulties as causes of workers' anger.

In addition, Johnson and Indvik (2000) believe that the end of lifetime employment and job security has led to the anger and frustration that is now rife in workplaces. Johnson and Indvik (2000) propose that "even civil service and military positions, once known as cradle-to-grave jobs are being reengineered out of existence" (page 166) and continue to state that "downsizing, restructuring and reengineering are turning workplaces upside down which makes workers frustrated, scared and angry" (page 166). As a result, Johnson and Indvik (2000) have suggested that workers are acting out in a multitude of ways, in reaction to such changes, which are detrimental to the individual and the organisation.

#### **2.4.2 Summary of causes of anger**

Such research has shown that irrespective of the methods, data on the causes of anger provide similar results, particularly with regards to perceived wrong doing, issues of unfairness, injustice and disrespectfulness. Furthermore, the rapid structural and procedural changes taking place in organisations are also causing angry workplaces.

### **2.5 CHARACTERISTICS OF ANGER AT WORK**

According to AET, affective reactions are caused by affective events. Studies that have investigated affective reactions have shown that both positive and negative experiences

have decidedly different effects on the workers' behaviour and attitudes (Fisher, 2002a; Grandey et al. 2002). Although such studies have enabled researchers to start to delineate which emotions are causing workers to behave and act in certain ways, they still do not answer questions with regard to the actual emotion felt. For instance, little is known about the characteristics of anger incidents, that is, the frequency, intensity and duration of anger. In addition, little is known about what people do during the anger incident; for instance, are they expressing, suppressing or controlling their anger while feeling angry and are people performing emotional labour? Furthermore, are all these factors related to subsequent behaviours, feelings and attitudes? This section will look further into these concepts and they will be described in greater detail below.

### **2.5.1 Frequency, intensity and duration of anger incidents**

*For every minute you are angry, you lose sixty seconds of happiness  
(Ralph Waldo Emerson)*

#### ***Frequency and intensity of anger***

Some researchers argue that it is the frequency of anger incidents per se that influence behaviour and attitudes (Ashkanasy et al. 2002; Fisher, 2002b; Grandey, Tam & Brauburger, 2002), and that feelings of anger do not need to be experienced very strongly (Miner, Glomb & Hulin, 2000) to have an effect on workers' behaviour and attitudes. However, other researchers (Grandey et al. 2002) investigating frequency and intensity of anger incidents argue that it is the intensity of emotions felt that affect how participants behave and feel at work and that most workers are likely to feel intense anger when they do become angry at work.

#### ***Duration***

In addition, anger, like other emotions, does not appear in short bursts. Indeed, for many, it may endure in time and possibly transform into some other state. Gibson and Barsade (1999) looked into the duration of anger at work further and reported that almost half of all workers felt 'a little angry' at work and almost a quarter felt chronically angry. This supports the notion that anger is not just an episodic event but one which endures in time (Averill, 1982). When looking at the temporal dimensions of



anger Averill (1982) found that 2% of anger incidents lasted less than 5 minutes and 10% lasted longer than 3 days.

### **2.5.2 Expression, suppression and control of anger incidents**

It is not just the causes of anger that have been looked at, but also how people respond to anger at work. Angry responses in the work setting are said to be important for a variety of reasons, most visibly, the issue of workplace aggression. However, as already mentioned, workplace aggression is rare and feelings of anger hardly ever lead to violence (Gibson & Barsade, 1999; Upson, 2004). On the other hand, expression and suppression of anger may have damaging effects on relationships among workers and produce a hostile environment.

#### ***Expression of anger***

*Speak when you are angry and you will make the best speech you will ever regret*  
(Lawrence J Peter)

The expression of anger is said to be highly stress inducing and evidence suggests that there is a robust association between anger and the deterioration of coronary health (Robins & Novaco, 2000). Furthermore, previous studies have found (Thomas, Smucker & Droppelman, 1998) that expressing anger can add to the distress of an angry situation rather than giving relief to the angry person.

#### **Expressing anger: maybe it is good for us**

Averill (1982) found that despite the fact that following a typical episode of anger a person was liable to feel irritable, depressed and in a generally negative mood, the overall outcome of the typical angry episode was evaluated positively. Furthermore, Deffenbacher, Oetting, Lynch and Morris, (1996) proposed that anger expression that involves positive, assertive, problem-oriented forms of anger may be beneficial for the individual. In addition, Gibson and Callister (2010) state that positive outcomes of anger expression have been linked to helping individuals achieve personal goals and to motivating individuals within the organisation.

In deed, outcomes of anger incidents are starting to be viewed as positive or negative, or functional or dysfunctional. It is believed that the consequences of anger are more likely to be functional when expression of anger is low intensity, expressed verbally as opposed to physically, and in settings where anger expression are considered normatively appropriate (Gibson, Schweitzer, Callister & Gray, 2009, as cited in Gibson & Callister, 2010). On the other hand, intensity of anger expression has been shown to affect anger outcomes, with greater intensity leading to more negative outcomes, both for individual and organisations.

**Accumulation and powerlessness linked to the expression and suppression of anger**

The accumulation of anger is believed to have an effect on the expression and suppression of anger. For instance, participants in a study carried out by Thomas et al. (1998) reported that the expression of anger emerges as the culmination of a build up of anger over time, and participants eventually ‘explode with anger’. Participants in such cases described themselves as acting out of character and being unrecognisable to themselves.

Feelings of powerlessness have also been linked to the expression and suppression of anger. Thomas et al. (1998) reported how participants in their study became angry when the offender ignored them or did not seem to hear them. One participant claimed “The ability to make oneself heard is perhaps the epitome of powerlessness” (1998, pg 318).

Also, when participants suppressed their anger they found that it left them with a feeling of powerlessness and literally deprived them of strength. One participant described how she became angry at her supervisor because every time she came in to the office she did so without knocking and this was seen as an invasion of privacy. However the participant never did anything about it, as she believed her boss would pay no attention to her. Another participant became angry at coworkers who did not do their work conscientiously. This participant would always end up going to the bathroom to cry. In such cases anger tended to be kept inside to “preserve relationship harmony” pg 319.

## ***Suppression of anger***

*Holding on to your anger is like grasping a hot coal with the intent of throwing it at someone else; you are the one who gets burned*

*(Buddha)*

### **Suppression of anger, covert coping and health effects**

Keeping anger in or suppressing anger, whether to ‘preserve relationship harmony’ or for other reasons, could also have detrimental effects on the individual’s health and may well lead to depression, stress and even heart disease and high blood pressure (Deffenbacher, Oetting, Lynch & Morris, 1996; Robins & Novaco, 2000).

Indeed, recent figures from a study carried out by Leineweber, Westerlund, Theorell, Kivimaki, Westerholme and Alfredsson (2009) suggest that men who use covert coping (i.e. suppressing anger) at being unfairly treated at work are up to five times more likely to suffer a heart attack or even die from one, than men who let their frustration show. In the study, Leineweber et al. (2009) assessed covert coping with two items “letting things pass without saying anything” and “going away” (page 4), and asked participants how they usually reacted when treated in an unfair way or when getting into a conflict with a superior or workmate. Results from this study suggest that avoidance of covert coping may lead to health benefits, and that low exposure to unfair treatment may reduce risk of coronary heart disease incidence and cardiovascular mortality. However, the study did not suggest what might be a particular healthy coping style. Furthermore, there was no association between expressions of anger either aggressively or calmly when experiencing unfair treatment and myocardial infarction or cardiac death.

Leineweber et al. (2009) suggests that the underlying mechanisms of how covert coping at being unfairly treated can lead to such dreadful consequences for the individual still remain largely unknown. However, the authors do propose that an often-stated hypothesis is that circumstances that frequently evoke anger may result in psychophysiological tension, which in turn facilitates the development of hypertension and related illnesses, particularly when anger is not expressed. The basic idea is that arousal that ‘boils under the surface’ and is not allowed to be constructively dealt with will cause physiological reactions.

Descriptions of anger, relating to tension in the body, have also been found in a study carried out by Thomas et al (1998). They described how women's descriptions of anger tended to include the body and that much of women's anger was described as confined within the body. One woman described being all tensed up inside. 'I can tell if I hold my anger for awhile...my anger takes the form of stress in my neck...it's hidden but my body knows' (pg. 315).

### ***Controlling anger***

*Do not teach your children never to be angry; teach them how to be angry*  
(Lyman Abbot)

Research on anger has tended to focus on the adverse effects of expression and suppression of anger and little research has been carried out on the control of anger. However, researchers suggest that controlling anger would not only be effective for the individual but also for the organisation in terms of productivity and organisational harmony (Stearns and Stearns, 1986 as cited in Gibson and Callister, 2010). Gibson and Callister (2010) describe the control of anger as "anger that is expressed at a lower intensity than the level at which it is felt" (pg. 72) and continue to propose that people control their anger in order to reduce its adverse effects. In addition, Burns, Evon, and Strain-Saloum (1999) state that it is how the individual handles anger that has more profound effects on the severity of cardiovascular disease and the magnitude of cardiovascular reactivity than does and individual's propensity to become angry.

### **2.5.3 Motivation for the expression and suppression of anger**

*He took over anger to intimidate subordinates, and in time anger took over him*  
(Saint Albertus Magnus)

### ***Motives***

Another important question in the study of anger is the reasons why people become angry. Averill (1982) found 11 motives to anger: the need to assert authority; the wish to take out revenge on the offender; the desire to bring about change in the behaviour of the offender, for both the benefit of the angry person and the offender; the desire to

strengthen the relationship between the angry person and offender; to 'get even; to 'let off steam'; to express a dislike for the offender; to get the offender to do something for the angry person; to break off a relationship and to get out of doing something for the offender.

Averill (1982) believes that anger is more often than not constructively motivated, and angry persons are said to want to change conditions that lead to the instigation rather than inflict pain or harm on the offender. Fitness (2000) found that the motivation of anger in her study was dependent on the status of the angry person. For instance, superiors became angry at subordinates in order to try and rectify the situation or to intimidate the offender and show the offender "who's in charge" (pg. 155).

#### **2.5.4 Emotional labour**

*Anger is an acid that can do more harm to the vessel in which it is stored than to anything on which it is poured*  
(Mark Twain)

Finding out about how a person behaves when they experience anger and whether they express, suppress or control anger tells us what the person does, or rather asks about their behaviour, at the time of the anger incident. However, asking alone, if a person expressed, suppressed or controlled their anger only tells us what they did during an anger incident and it does not tell us if they faked emotion. Asking a person how much they tried to hide their anger from the offender, and if they tried to express an emotion that they did not really feel, will help determine if they performed emotional labour. As previously mentioned people tend to suppress anger at work more than any other emotion (Mann, 1999) and this, in turn, can lead to poor consequences for the individual's health. Therefore, finding out more about the suppression of anger, and the frequency and extent to which individuals perform emotional labour, will help establish what factors influence the faking of emotion during anger incidents, and if performing emotional labour has an effect on the outcomes of anger incidents. A description of emotional labour follows.

### *Emotional labour and display rules*

As already mentioned, the requirement to display specific emotions in front of customers, clients, patients, students, etc., and to manage one's own emotions to achieve the required display, is known as emotional labour. The requirement to display specific emotions at work is said to be governed by display rules. These are norms and rules which guide many everyday interactions and in many instances these rules also include what emotions should be shown. Although little is known about how displays of specific emotions vary between specific people and specific times, researchers presume that people adjust their emotion displays to the context; or as Ekman (1972 as cited in Ravid, Rafaeli and Grandey, 2009) proposes, the context determines which emotions may be displayed when and to whom. However, emotional labour requirements are also determined by situational characteristics. Tschan et al. (2005), for example, proposes that nurses have to be friendly with all patients, yet they have to be severe if they find out that a patient has been throwing their pills away. Thus emotional display rules are contingent on the specific characteristics of different situations too.

### *Emotional labour: authenticity and dissonance*

If a person feels and displays the emotion that is required by the organisation's display rules, this is called authenticity or emotional harmony. However, if a person fakes emotion in order to comply with display rules and norms, it is called emotional dissonance. For example, an employee may suppress a negative emotion and fake the required positive emotion. An employee may also suppress a positive emotion or negative emotion if the requirement is neutral, or deliberately express negative emotions, even if one does not feel them.

### **Mechanisms related to dissonance: surface and deep acting**

Several authors distinguish different mechanisms related to dissonance, such as surface and deep acting. Surface acting involves a person expressing the emotion required by a display rule but not feeling that particular emotion (Hochschild, 1983). It essentially involves a person 'pushing down' one's authentic expression of self in favour of an emotional mask. Alternatively, deep acting (trying to feel the required emotion) involves 'pumping up' by trying to bring the required, and one's true feelings, into alignment (Grandey, 1988, as cited in Brotheridge & Lee 2003).

Both surface and deep acting are said to have negative effects on the individual yet those people involved in surface acting are expected to suffer the most (Pugliesi, 1999, as cited in Totterdell & Holman, 2001). Furthermore, employees experiencing emotional dissonance may not be able to successfully mask their true emotions. Thus, the detection of inauthentic expression may lead to even poorer perceptions by the customer, of service quality, resulting in a downward spiral of poor service and increased emotional labour (Mann, 1999).

However, Ashforth and Humphrey (1993, as cited in Grandey 2000) suggested that emotional labour does not necessarily require conscious effort. In fact, they suggested that surface and deep acting may become routine and effortless for the employee rather than sources of stress. Furthermore, Zapf (2002) argues that complying with emotional labour requirements can be seen as a goal-directed action. If people follow well rehearsed scripts the process can be automatized without much regulation effort. However, it is also argued (Grandey, 2000) that emotional dissonance makes automatic regulation less likely, and emotion management and faking emotion may require additional effort, and a higher level of self-control, which has been found to be a limited resource.

### ***Emotional deviance***

In addition to authenticity and emotional dissonance is emotional deviance (Grandey, 2000). Grandey (2000) explains that this is when a person displays their felt emotions rather than the required emotion and it is said to be due to a lack of self-control. Emotional deviance can result in a person expressing negative emotions when neutral or positive emotion requirements exist or expressing positive emotions when neutral emotions are required. Furthermore, emotional deviance is likely to have just as many negative consequences as emotional dissonance and Tschan et al. (2005) propose that “expressing not the required, but the felt emotion may be perceived as a violation of interaction rules and may contribute to unpleasant reactions of the interaction partner. This is said to be especially true if the emotion felt and shown is negative” (pg. 197). In addition, employees that show deviance may be punished by the organisation via a warning or dismissal and/or the interaction partner by choosing not to deal with that particular person again.

The negative consequences of emotional labour on the individual must not be taken lightly. As research on emotional labour has found that the requirement to regulate emotions can lead to burnout and lowered well-being (Grandey, 2000; Holman, Chissick & Totterdell, 2002). It would also seem that these negative consequences apply to both interactions with coworkers and customers and when individuals are using emotional dissonance or deviance (Tschan et al. 2005). These effects are mentioned in further detail below.

### *Emotional labour and health effects*

#### **How does emotional labour lead to poor health?**

Emotional labour, no matter what form it takes, can lead to stress and eventually to horrendous consequences for the individual. Grandey (2000) proposes the mechanisms of how this takes place.

Grandey (2000) claims that performing emotional labour can lead to stress, during which time the endocrine system releases hormones and the autonomic nervous system is activated, and breathing, heart rate and blood pressure all increase. Thus, the body is using energy to respond to the stress which means there is less energy for other tasks such as the immune system. This is supported by the fact that, over the years, psychologists have linked emotions, and the management of emotions, to serious health problems such as cancer and heart disease (Gross, 1989, 1998a; Pennebaker, 1990; Steptoe, 1993 cited in Grandey, 2000).

Furthermore, when individuals experience anger, or any emotion, they tend to have an emotional tendency (attack or flee): this is said to correspond with Fridja's (1986, as cited in Grandey, 2000) idea of action readiness. The arousal state from becoming angry informs the individual and gets them in a bodily state to respond. However, in settings, such as the workplace, angry people learn to regulate their emotion tendency so that their reaction to offenders does not result in 'fight or flight' (Cannon, 1932 as cited in Grandey, 2000). Therefore, Grandey (2000) proposes that the action tendencies to respond to anger-producing stimuli are overridden by coping or regulatory processes so that people behave appropriately in social settings such as the workplace.



Display rules at work often require that individuals must inhibit or suppress feelings. Grandey (2000) reports people are able to inhibit expressions with only slight observable signs of the deception taking place. Nonetheless, this may tax the system. Furthermore, regulating emotion lowers behavioural activity and has been found to increase autonomic nervous system activity. Thus, Grandey (2000) states that “it is reasonable to predict that long-term inhibition would be associated with overall heightened physiological activity. The physiological activity of bottling up emotions taxes the body over time, by overworking the cardiovascular and nervous systems, and weakening the immune system” (pg.100). In deed, research has linked the inhibition of emotions to a variety of physical illness, including higher blood pressure and cancer. In fact, Grandey (2000) reports that the inability to express negative emotion is one of the strongest predictors of cancer.

### ***Does emotional labour exist amongst coworkers?***

Most research on emotional labour has been carried out in the service industry and particularly looked at interactions between employees and customers. However, it should also be highlighted that interactions with colleagues and interactions in non-service occupations may also result in faking emotion. This is an area that has been neglected in past research (Tshcan et al. 2005).

It is certainly possible that emotional labour exists amongst workers at all levels of the organisation. In deed, it is said that display rules exist among colleagues, and standards about what emotions should be displayed or even felt in interactions with colleagues, may well be part of the corporate culture. The extension of the concept of emotional labour to interactions with colleagues has thus been investigated by several researchers (Grandey et al. 2002); Totterdell & Holman, 2003). For instance, Grandey, et al. (2002) proposed that anger creates a tendency to attack or confront the source of an anger incident. However, in a work context this may be inappropriate for a variety of reasons, and it is said that employees typically need to suppress their negative reactions to anger incidents, especially when the source of anger is a customer. Based on this premise Grandey et al. (2002) carried out a study with both customers and coworkers as instigators of anger. Grandey et al. (2002) found that anger incidents in response to customers were more likely to involve reports of faked emotions than those in response to coworkers.

Additionally, Totterdell and Holman (2003) found that negative events led to more dissonance when they involved customers compared to coworkers. Tschan et al. (2005) propose that this could be due to the “weaker display rules” (pg. 198) in interactions with coworkers as compared with customer-related interactions and explains that “in comparison to the often explicit and specified rules about how to deal with customers and clients, rules about interactions with coworkers may be less specified, leaving more leeway for ‘violation’” (pg.198). Furthermore, Tshcan et al. (2005) report that such violations may be easier to repair because interactions with coworkers are thought to be part of long-term relationships, which are based not only on immediate, but on long-term reciprocity. This allows for a compensation (e.g. excuses later on, or by providing enjoyable interactions), and this compensation may occur quite some time after the event (Tshcan et al. 2005). Furthermore, norms for long-term relationships may also specify behaviours quite opposite to those expected in dealing with clients and require individuals to be honest; thereby authentic emotions are expected to be shown.

Based on these assumptions Tschan et al. (2005) compared the emotional labour carried out with both clients and coworkers, in the service and non service industries and reported that emotional labour requirements exist not only in interactions with clients but also in interactions with coworkers. Although it was found that dissonance and deviance existed in both industries, deviance was more likely when the interaction partner was a colleague, and dissonance was more likely if the interaction partner was a client. Tschan et al. (2005) proposed that this was anticipated, as mentioned above, rules of relationships are different for interactions with clients and coworkers, and display rules may be less strict for colleagues than customers and clients.

Interestingly, compared with participants in non-service professions, those in service professions reported not only more interactions with clients but also with coworkers (Tschan et al. 2005). In addition, they reported more emotional labour in interactions with coworkers than did people in non-service occupations. This is said to reflect the different cooperation requirements in these professions, or a perception of more emotional labour requirements in general in these professions. Hence, Tschan et al. (2005) has pointed out that the enormous amount of research on emotional labour in the service sector has certainly been justified, but the reasons for this research are only partly correct. “It is correct that service work is, indeed ‘people work’; it is not correct

that this people work refers not only to clients (which is the focus of most studies) but to a considerable degree also to coworkers” (pg. 212). Thus, Tschan et al (2005) concludes that emotional labour in the service sector may be more frequently encountered, as in this sector one has to interact with both colleagues and clients.

### ***Emotional labour and job satisfaction***

With regard to job related attitudes as effects of emotional labour requirements, the evidence is mixed. Emotional dissonance shows a straightforward pattern in most studies. For example, Rutter and Fielding (1988 as cited in Tschan et al. 2005) found that the requirement to suppress genuinely felt emotions was negatively correlated with job satisfaction. Nonetheless, some studies have found no relationship between emotional labour and job satisfaction while some studies have found associations between the requirement to display positive emotions and enhanced well-being. Overall, although emotional labour is said to be vital for customer retention and satisfaction, it is said to have more negative consequences than positive consequences.

### ***Emotional contagion: the expression of anger and its effects on observers***

Studies on emotional labour have not only shown that the successful management of emotions plays a critical role in the process of customer retention, but it has also shown that there is a matching effect between employee and customer emotion. This highlights the powerful influence that one person’s emotional signs can have on another person’s emotional state (Miron-Spektor and Rafaeli, 2009). People are said to catch or are infected by emotion from others, which has become to be known as emotional contagion. Emotional contagion has been shown to be important in service settings and may have implications for organisational application. It is also suggested that emotional contagion is evident among work groups (*HRM Guide*, 2008) and that one member’s emotional displays can affect group performance.

Additionally, Miron-Spektor and Rafaeli (2009) propose that anger can influence the emotions, thoughts and behaviours of other people who are not the angry person and they may react to the angry person or imitate the anger because of emotional contagion. The observer may feel discomfort and anxiety associated with any exposure to anger, these feelings of discomfort and anxiety require mental resources from observers, thus

limiting resources available for handling other aspects of the situation and subsequent tasks. However, the effect on the observer may vary depending on the intensity of the anger shown and the directness. Intense anger is more likely to have a more powerful effect on observers than mild or non intense anger, and both direct and indirect forms of anger (e.g. sarcasm) may also affect observers' performance. Also, it is believed that observing anger may also affect observers' perceptions and judgements about the environment in which they work. Observers may generalise from the anger incident and angry person to make assumptions about the environment by perceiving it is unsafe, dangerous or unpleasant.

These findings show how powerful an emotion such as anger can be, and that its effects may not only be important in interactions with employees and customers but also in interactions with colleagues themselves. The research on emotional contagion suggests that negative emotions are more contagious than positive emotions and negative emotions are said to affect both individual and group behaviour. Therefore, expressing anger is detrimental not only to the individual experiencing or expressing it but it may also be detrimental to the people who witness it.

### **2.5.8 Summary of characteristics of anger incidents**

Taken together these previous points indicate that anger may not only be experienced frequently by many people at work, but that it can be intense and long lasting when it is experienced. Research has shown that if people experience intense anger, irrespective of whether they hold it in or let it out, anger has the potential to kill. Furthermore, expressing and suppressing anger relates to outcomes that could seriously have a damaging effect on the individual and organisation. However, trying to control anger seems to have potential benefits not only for the organisation, but also for the individual and would seem the most effective way to stay healthy and live longer. Also, it would seem that the situation of the anger incident and the offender have a substantial effect on the motives for the expression and suppressed of anger. Thus finding out more about the frequency, intensity, duration, expression, suppression, control and motives for expression and suppression of anger will be researched further.

In addition, faking emotion can affect the employee and customer relationship, it can affect the employee's health both psychologically and physically and lead to negative

outcomes for the organisation. However, most research on emotional labour has taken place within the service sector, and more work on emotional labour is needed between colleagues within the workplace. As anger has been found to be the emotion most likely to be suppressed in interactions at work (Mann, 1999), finding out more about employees' experiences of anger incidents and emotional labour, within different contexts, in external and internal encounters and in different organisational sectors, will ultimately advance our understanding of anger.

## **2.6 CONSEQUENCES OF ANGER**

*How much more grievous are the consequence of anger than the cause.*

*(Marcus Aurelius)*

As stated by Weiss and Cropanzano (1996), affect driven behaviours follow directly from affective experience and they are not mediated by overall attitude. Thus, AET proposes that some behaviour is directly driven by impulsive feelings and call these 'affect-driven behaviours'. Over time, a series of affective experiences may cumulate to influence work attitude and affect judgement-driven behaviours, such as quitting. So, according to AET it would seem that in order to capture a full variety of behaviours following an angry incident one needs to investigate behaviour both in the short and long-term.

### **2.6.1 Short-term and long-term consequences of anger**

As previously mentioned (BCS, 2009) most responses to anger are non aggressive; nonetheless, the outcomes of experiencing, expressing or suppressing anger may be detrimental to the individual and the organisation in other ways (Averill, 1983). For example, Fitness (2000) has already found that individuals reacted to anger, either immediately, by confronting the offender or withdrawing from them. Alternatively, individuals reacted after an incident was considered over, by using one of five categories of behaviour coded by Fitness (2000). These categories are: constructive behaviours (i.e. accepting an apology, actively negotiating a resolution); emotional withdrawal (i.e. staying cold or giving someone the 'silent treatment'); quitting, (i.e. as a direct result of the offence); legitimate punishment (i.e. appealing to higher authorities, arranging to have an offender dismissed or demoted) and revenge or

illegitimate punishment (i.e. arranging for offenders to be assigned undesirable jobs, spreading lies or gossip, sabotage, hiding documents or 'going slow').

Although research on the consequences of anger at work has been limited, clinical psychology research shows that reactions to anger can not only be directed toward the source of the anger but that they can also be directed inward, in ways that are destructive to oneself (O'Neill, Vandenberg, DeJoy, & Wilson, 2009). Based on this research, Neill et al. (2009) looked at perceived organisational support (P.O.S. i.e. employees' perceptions of workplace conditions, such as levels of supervisory support) and anger. The authors found that anger appears to result from employees' negative perceptions of workplace conditions and that anger was associated with a number of work related anger-out and anger-in behaviours. For example, anger partially mediated the relationship of low P.O.S and two common measures of organisational withdrawal: turnover and absenteeism. Anger also partially mediated the relationship of low POS and anger to a common measure of organisational safety: accidents of the job. Finally, anger was associated with anger-in behaviours, in particular, alcohol consumption and high risk health behaviours.

### **2.6.2 Chronic anger**

In addition, evidence provided by Gibson and Barsade (1999) already suggests that feelings of anger, long after an anger incident has initially occurred, are being harboured by the angry person. Gibson and Barsade (1999) highlight the difference between episodic and chronic anger (i.e. the ongoing, generalised feelings of anger directed towards the offender) and believe that these differ with regard to causes, characteristics and consequences. They propose that causes of workers' chronic anger not only include feelings of disrespectfulness but that workers tend to feel betrayed by the organisation, experience differences in values between themselves and the organisation and feel that promises have been broken.

As with causes of anger incidents, chronic anger is believed to have different consequences than relatively short-term feelings of anger. For example, Gibson and Barsade (1999) propose that short-term or episodic anger aroused by specific events tends to be a 'goad' emotion, one that pushes a person to undertake self-protection or retaliatory action and they suggest that this anger may be related to energy. However, chronic anger is related to job stress and feeling overworked, it is also negatively related

to energy and boredom. Therefore, chronic anger is associated with sapping of energy and interest at work and is negatively correlated with happiness, lack of effort, stress and depressive tendencies. Gibson and Barsade, (1999) suggest that chronic anger may lead to a type of anger that is released in more subtle ways, if at all, leading once again to detrimental results for the individual and the organisation.

In addition, more research into chronic anger will be of great interest. Not only is chronic anger believed to ‘sap energy’ but it is said to have an effect on job satisfaction; thus, the organisation may suffer in terms of effectiveness and productivity (Gibson & Barsade, 1999). Further research is needed in this area to determine why some individuals feel chronic anger and what the outcomes are of feeling chronic anger.

### **2.6.3 Summary of consequences of anger**

Thus, based on the evidence so far, one of the aims of this study is not only to gain insight into the short-term effects of anger but also the long-term effects of anger. Although previous studies have attempted to measure relationships between emotions felt and other variables, such as work attitudes, this has not been carried out over any a reasonable length of time. It is therefore unknown how time may impact on these relationships. Doing so, will help identify the dynamics of anger and particularly chronic anger, how anger changes across time and how it affects subsequent behaviours and emotions at work in the long-term.

## **2.7 CONSTITUENT EMOTIONS**

*Hate is settled anger*

*(Cicero)*

### **2.7.1 Constituent emotions: missing elements from AET**

AET proposes that affective events are associated to affective reactions, which in turn, affect subsequent behaviours and attitudes. What it does not suggest is that anger may change and turn into some other emotion which may have an effect on subsequent behaviours and attitudes. Evidence from previous research on anger suggests that anger may not occur in isolation (Engerbretson, Sirota, Niaura, Edwards & Brown,1999;

Fitness, 2000) and that constituent emotions could be experienced by individuals which could mediate the effects of anger.

### **2.7.2 Anger does not occur in isolation**

Further evidence for this proposition is provided by Engebretson, Sirota, Niaura, Edwards and Brown (1999) who found that happiness declined significantly during anger induction. Furthermore, Engebretson et al. (1999) also found that anger induction produced significant increases in depression and anxiety ratings. Thomas et al. (1998) also found that participants, when describing anger incidents, found it difficult to isolate anger from other feelings, such as hurt, frustration and disillusionment and confusion. These findings fit in with the literature on moods and emotion, which states that moods and emotions seldom arise in isolation but rather in patterns with other mood and emotion combinations.

### **2.7.3 Why do feelings of anger transform to other feelings**

Research into power differences in interactions provide clues as to why anger may transform into other emotions. It is said that we are less likely to express our anger if we fear retaliation from a powerful other; whether that is the offender or the management that disproves of such displays (Lazarus & Cohen-Cash, 2001 as cited in Payne & Cooper, 2001). As a result, anger may soften, become moot or change to an altogether different emotion such as guilt or anxiety.

### **2.7.4 Anger and hate**

In addition, researchers have found that feelings of anger are often transformed to other feelings, such as hate (Averill, 1983; Fitness, 2000). Fitness (2000) found that hate was associated with feelings of humiliation following an anger incident especially if workers felt that they had less power in the situation compared to the offender. Fitness (2000) states that hate is particularly unhealthy for future relationships and proposes that managers need to be aware that lower power workers may have negative feelings towards higher power workers long after anger incidents have occurred. This is probably because lower power workers are less likely to confront higher power workers to resolve a situation. Furthermore, in light of the findings that many anger incidents



are perceived to be unresolved, it is likely that workers may be harbouring grudges against offenders long after they have occurred (Averill, 1982; Fitness, 2000). These grudges may also transform into other feelings, which may be by-products of feeling chronically angry.

Indeed, further evidence from research into chronic anger (Gibson and Barsade, 1999) seems to suggest that anger, if not given a healthy outlet, may manifest and change into other emotion states which sap the worker of energy. This highlights the fact that anger is not just a short-term emotion but that it can endure over time and may change into other emotion states. Hence it has been suggested (Fitness, 2000) that more finely detailed data about constituent emotions (e.g. hate, depression) should be looked at when researching any emotion.

### **2.7.5 Position of constituent emotions in the conceptual framework**

AET does not include constituent emotions in its framework, so the question as to where to place constituent emotions in the conceptual framework, in this study, was based on previous research already carried out on emotions and anger. As emotions differ to behaviour and they can potentially last over time it was thought beneficial to find out if constituent emotions could, as a result of feeling angry, have an effect on job attitude (i.e. job satisfaction) and subsequent behaviour. Therefore constituent emotions are seen as a moderator to job attitude (i.e. job satisfaction) and will be appropriately placed in the conceptual framework.

## **2.8 INCIDENT RESOLVED AND SOCIAL SUPPORT**

*Anger repressed can poison a relationship as surely as the cruellest words*

*(Dr Joyce Brothers)*

### **2.8.1 Perception of the successful resolution of anger incidents and social support**

Two factors which seem to play an important part in the unfolding process of anger, in particular the outcome of anger incidents, are whether or not the angry person perceives that the anger incident has been successfully resolved (Averill 1982; Fitness, 2000) and whether or not the angry person receives social support from friends or family

(Ashkanasy, Hartel and Daus, 2002; Grandey, 2000). It is not known exactly where incident resolved and social support will fit into the conceptual framework at present, so it was omitted until the interviews had been carried out and analysed.

### *Successful resolution of anger incidents*

It would seem from the literature that many anger incidents are not resolved. As Averill (1982) reported in his study on people's anger incidents, 63% were perceived as not being successfully resolved, even after the anger-eliciting incident was considered to be over. As Thomas et al. (1998) reports, if anger is not verbalised conflicting situations cannot be resolved, and anger cannot be dissipated. This can then lead to a break down in the relationship between the interactants and the angry person may take out revenge on the offender or the organisation.

Fitness (2000), in her study on workers' descriptions of anger incidents, proposed that workers angered by subordinates would be more likely than workers angered by superiors to confront the offender immediately following an anger incident. With respect to whether or not the workers perceived the incident had been successfully resolved, 74% of workers angered by subordinates agreed that they felt the situation had been successfully resolved and that their relationships were "back to normal" (Fitness, 2000, pg. 156) compared to only 34% of workers angered by a supervisor and 37% angered by a coworker.

Fitness (2000) further proposed that this in turn would have an effect on the later or ongoing behaviour of workers, depending on their power in the situation. For example, subordinates who do not confront their superior over an anger incident, as they may fear the consequences of doing so, may not feel that the incident has been successfully resolved and may take "covert retaliatory action" (Fitness, 2000, pg 149). Fitness (2000) compared the behaviours during and after anger incidents and the workers' beliefs about whether or not the incident had been successfully resolved. As expected, Fitness (2000) found that subordinates were less likely to confront offenders, with only 45% of workers angered by superiors immediately confronting them, compared to 58% of workers angered by coworkers and 71% of workers angered by subordinates. Following on from this, and as expected, 74% of workers angered by subordinates agreed that the anger incident had been successfully resolved and quite happily reported

that the relationship with the offender was as it was before the anger incident. However, only 34% of workers angered by superiors and 37% angered by coworkers felt that the incident had been successfully resolved. Furthermore, those workers who felt that the incident had not been successfully resolved with superiors and coworkers, felt an ongoing distrust and hatred for the offenders. These findings suggest that if the angry person perceives the incident to be unresolved their feelings of anger may persist and have a subsequent effect on other constituent emotions and behaviour (Fitness, 2000).

### ***Social support***

In addition, it is thought that angry people who receive social support following an incident, either from colleagues at work or from friends and family at home, are less likely to suffer from the detrimental effects of anger incidents (Fitness, 2000). Indeed, clues about how much social support can affect the outcomes of experiencing negative emotions at work are provided from the literature on emotion regulation. This suggests that the environment is a very important factor in understanding emotion management and that the situation in which employees work may affect the level and type of emotional labour which they engage. Furthermore, support from supervisor and coworkers helps to create a positive work environment. If employees perceive that they work in a supportive climate then they are more likely to feel greater job satisfaction, have lower levels of stress, lower turnover intentions and higher team performance (Cropanzano, Howes, Grandey & Toth, 1997 as cited in Grandey, 2000).

In addition, Grandey (2000) has also found that social support in service settings seems to help protect individuals from stress and can act as a buffer against the detrimental effects of health risks. In addition, Abraham (1998, cited in Grandey 2000) tested social support as a moderator of emotional labour and outcomes and found that social support interacted with emotional dissonance to buffer against job satisfaction.

### **2.8.2 Summary of incident resolved and social support**

Perceiving that an incident has been successfully resolved, and whether or not an angry person receives social support following an angry incident, seems to play an important part in the outcomes of anger incidents. Therefore, investigating whether or not the

anger incident is perceived to be resolved and whether or not angry persons received social support following the anger incident, will also be examined within the unfolding process of anger incidents.

## **2.9 INFLUENCES OF ANGER INCIDENTS**

According to AET, stable work environment features influence the occurrence of different types of events. Although, the authors of AET do not specifically state which work environment features or events might be associated with affective reactions, it does suggest that situational or contextual factors can influence people's experience of anger. In reviewing the literature, it is apparent that there are several different factors which may act as moderators and may influence anger incidents. The factors chosen in this study, which are the source of the anger incident, the context of the anger incident, the employment sector, and gender of the angry person are factors thought to influence anger incidents, right through from the cause, to the characteristics and finally to the short and long-term consequences of anger incidents. As mentioned previously these factors will be measured in study two: the anger diary; however, they will be described below as they are part of the conceptual framework.

## **2.10 SOURCE OF ANGER: INTERNAL AND EXTERNAL ENCOUNTERS**

*I was angry with my friend I told my wrath, my wrath did end. I was angry with my foe:  
I told it not, my wrath did grow  
(William Blake)*

### **2.10.1 Internal and external encounters**

It has been proposed that external encounters (e.g. interactions with customers), may be a major cause of anger for workers in customer contact jobs. However, little is known about the angry encounters between workers within organisations (i.e. internal incidents) as most research to date has concentrated on external incidents.

Indeed figures show that anger is experienced between workers. A study, *Office staff get close to violence*, carried out by Pertemps (2002) reported that more than half of office staff in the U.K. has claimed that they have become so angry at work that they

have nearly punched a colleague. However, even though the participants in this study felt that they could have punched a colleague they did not, and most of the participants suppressed their anger instead, choosing either to ignore the person, go off and make a cup of tea or just curse the person under their breath thereby allowing their anger to simmer away slowly. Furthermore, Bowen, (1999) proposed that managers need to be aware that their workplace could be a simmering cauldron of anger which could be manifesting itself in a wide variety of ways and may eventually cost the organisation money and slow down productivity.

Grandey et al. (2002) investigated anger incidents amongst both customers and colleagues and found that most anger events were customer induced. However, participants in Grandey et al.'s (2002) study were part-time employees which limit the generalisability of the findings to other employees. Fitness (1999) concentrated on differences of anger incidents between colleagues and found that anger undeniably existed among the workforce at all levels.

### **2.10.2 Summary of source of anger incidents**

Emotions and anger have tended to be investigated within the service sectors. This has provided a wealth of information on emotions in work settings. However, research also suggests that people are experiencing, expressing and suppressing anger with colleagues and supervisors as well. Thus, in order to advance our understanding of anger, anger incidents should not only be investigated within organisations where employees deal with people external to the organisation (i.e. external interactions), but also anger incidents should be investigated in everyday organisational interactions between employees (i.e. internal interactions).

## **2.11 THE CONTEXT OF THE ANGER INCIDENT**

*Anger ventilated often hurries toward forgiveness; and concealed often hardens onto  
revenge  
(Edward G. Buwler –Lytton)*

### **2.11.1 The importance of examining the context of anger incidents**

Research on anger at work has tended to focus on the investigation of external encounters (e.g. interactions with customers and patients) and the limited work that has taken place on internal encounters (e.g. with colleagues) has tended to look at anger from the perspective of subordinates, leaving out the experiences of supervisors and coworkers (Fitness, 2000). Fehr, Baldwin, Collins, Patterson and Benditt (1999) argue that the examination of the interpersonal context of people's experiences of emotion is critical to the understanding of individual differences in emotion.

### **2.11.2 Power differences and anger incidents**

Indeed researchers have begun to provide evidence to suggest that power differences do have an impact on anger incidents (Fitness, 2000; Grandey et al. 2002; Ravid et al. 2009) and that anger incidents vary according to the context and the relationship between interactants. For example, Fitness' (2000) study on participants' descriptions of anger at work has shown that the entire anger incident is influenced by the context of the incident and the perceived power differences of interactants. Fitness (2000) found that not only did the causes of anger incidents vary depending on who the offender of the incident was, but so did the immediate behaviour and later behaviour of the angry person. The key findings from Fitness' (2000) study follow.

#### ***Context and cause of anger***

Fitness (2000) found that the cause of anger was dependent on who the offender of the anger incident was. For instance, 69% of superior- instigated incidents involved unjust treatment compared to 28% and 16% of coworker and subordinate-instigated offences. Furthermore, 65% of coworker-instigated incidents involved morally reprehensible behaviours (e.g. laziness and dishonesty), public humiliation and disrespect, and 69% of subordinate-instigated incidences involved job incompetence or morally reprehensible behaviours.

### ***Context and immediate behaviour***

Fitness (2000) also found that immediately after an anger incident participants either confronted the offender of the anger incident or withdrew from them (e.g. walked away from the offender). Again, this was dependent on who the offender of the anger incident was as only 45% of participants immediately confronted superiors compared to 58% angered by coworkers and 71% angered by subordinates. Participants angered by subordinates were more likely to use confronting behaviours, either to “sort the situation out” (pg 155) or to intimidate offenders and let them know “who’s in charge” (pg. 155). Individuals who held these more powerful positions also said they behaved in such a way as they felt they had less to fear with regard to the consequences of their behaviour. However, participants who did not confront the offender did not do so because they feared the consequences of expressing their feelings to a more powerful other. With regards to withdrawal behaviours, only 29% of participants angered by subordinates withdrew from the offender compared to 55% and 42% anger by superiors and coworkers respectively. These figures clearly show that the more powerful the offender the more likely the angry person is to withdraw.

As already mentioned (see section 2.8.3 on constituent emotions) the impact of angry workplace interactions may be potentially longer lasting for subordinates than superiors as they are less likely to confront the offender and try to resolve the situation. Superiors may be unaware that subordinates are experiencing ongoing feelings of distress and distrust in the aftermath of anger incident. Plus higher power people pay less attention to lower power people and may miss cues about subordinates thoughts and feelings. Therefore, participants may be feeling chronically angered (Fitness, 2000).

### ***Context and consequences of later behaviour***

In addition to immediate behaviours following an anger incident, Fitness (2000) also looked at the later behaviour of participants, that is, after the anger incident was considered to be over. Fitness (2000) found that only 15% of workers angered by subordinates later withdrew (emotionally), compared with 39% and 45% of workers angered by superiors and coworkers respectively. With regard to constructive behaviours, 33% of workers angered by subordinates took constructive action to resolve the conflict compared with 9% of workers angered by coworkers and 9% angered by

superiors. There was also significant differences between punishment behaviours, with 31% of workers angered by subordinates taking legitimate action to demonstrate to the offender the “error of their ways” (Fitness, 2000 pg. 155), compared with 17% of participants angered by coworkers and 7% angered by superiors. Revenge or illegitimate punishment showed no significant differences between superiors, coworkers or subordinates and finally although numbers for quitting were low they were restricted to participants angered by superiors and coworkers. Once again, as with causes of anger and immediate behaviours, the majority of behaviours engaged in by participants after the incident was considered over, was dependent on who the offender of the anger incident was.

### **2.11.3 Expression of anger by higher status individuals**

In addition, other researchers have begun to examine interactions between colleagues and have discovered that the expression of anger is influenced by the power of the target person (Grandey et al. 2002; Ravid et al. 2009). For example, Ravid et al. (2009) explored employees’ attitudes towards the expression and suppression of anger. The results showed that employees believed that anger should be suppressed with managers more so than coworkers or subordinates. Furthermore, employees believed that anger should also be suppressed with customers, more so than coworkers, subordinates and managers, and finally, employees actually expected anger expression from customers towards employees. This study highlighted the fact that higher status was positively associated with overt expression of anger. The authors of the study suggested that this was because people who hold higher status positions may feel they can express their anger without fearing the consequences of doing so.

Such findings are supported by the claims of Miron-Spektor and Rafaeli (2009). They state that anger may serve as a tool in the hands of high-status individuals to influence lower-status others. Indeed, the greater the status differences between the angry person and the target of anger, the greater the chances that the higher status individual will authentically express his or her anger towards the target. Thus, not only do high status individuals have greater freedom to express their anger, they are more likely to benefit from it by affecting others.



### ***Supervisors who express anger are seen as dysfunctional***

However, supervisors or high status individuals who express their anger may be viewed negatively by other employees. Glomb and Hulin (1997) carried out a study in which they assessed people's perceptions of interactions which took place either between a supervisor and subordinate, where the supervisor expressed anger, or between a supervisor and subordinate where the supervisor did not express anger. The results showed that supervisors who expressed anger were evaluated less favourably than those who did not express anger, and subordinates interacting with angry supervisors received higher ratings than subordinates interacting with non-angry supervisors. However, although supervisors' expression of anger was seen as dysfunctional, it was seen as useful in some situations, such as when it was linked to solving a problem or motivating individuals.

Power seems to be a crucial factor in influencing anger incidents, its causes, subsequent behaviours and outcomes, can all be affected in various ways. Furthermore, the impact of workplace anger incidents may be potentially greater and longer lasting for subordinates than superiors because subordinates may be less likely than superiors to confront offenders and try to resolve the situation.

## **2.12 ANGER INCIDENTS IN DIFFERENT EMPLOYMENT SECTORS**

*Behaviours are guided by the invisible hand of norms for appropriate behaviour or expectations that are established by organisations*

*Goffman (2002, as cited in Brotheridge and Lee 2003 pg. 365)*

### **2.12.1 Organisational value and norms**

In bullying research, the values and norms of the workplace are said to influence how bullying is defined within a situation, how workers construe situations (for example, bullying or firm management) and whether bullying is acknowledged as a problem (Cowie, Naylor, Rivers, Smith, and Pereirad, 2002). The culture of the workplace is, therefore, seen as a form of filter through which behaviours are construed and through which a range of behaviours is accepted or tolerated (Cowie et al, 2002). As with bullying, the values and norms of the workplace can also influence how anger is

defined, interpreted and whether anger is also seen as a problem by workers. Indeed it has already been recognised that organisational norms, (i.e. the norms regarding which emotions should and should not be expressed by workers) (Rafaeli and Sutton, 1989), may affect the way workers feel with regards to the freedom to express their emotions to other people in the workplace.

Organisations are socialised to understanding these rules and norms (i.e. display rules). For example, the job environment or a particular work event may bring about an emotion reaction in the worker (e.g. anger) and behaviours may follow that would be inappropriate for the encounter (e.g. verbal attack). However, because display rules may state that such reactions are not appropriate, emotional labour regulates the individual's response.

Anger regulation has primarily been examined in the service sector (Glomb and Hulin, 1997), where display rules prescribe the expression of positive emotion and the suppression of negative emotions. Thus, it may be beneficial if participants could be included from a variety of organisational sectors, instead of just the service sector. As, Glomb and Hulin (1997) have suggested, different occupational roles may require different expectations concerning emotional expression. For example, anger may be less negatively evaluated in military personnel and police officers than it is of other occupations; thus anger expression may be found to be more prevalent in such occupations. Therefore, Glomb and Hulin (1997) have suggested that perceptions of emotional expression that is not expected of the employees in an occupational role should be investigated with respect to different occupations. Furthermore, whether the organisation encourages the display of positive or negative emotions, which may be displayed authentically or faked, it is the appropriateness of the display of emotion that is essential. Either through training (explicit requirements) or perceptions of what is just expected (implicit requirements), employees learn to gauge what is appropriate to express.

### ***Explicit and implicit norms***

Totterdell and Holman (2003) propose that most organisations have explicit or implicit requirements concerning which emotions employees express and how they express them. These requirements help to maintain formal and informal norms about expressed

emotions and are enforced (Ashkanasy et al. 2002) through the organisations' recruitment and selection strategies (i.e. through job descriptions and in interviews), socialisation (i.e. handbooks and training manuals about what emotions to express) and rewards and punishment (i.e. formal and informal practices to maintain the learned expressed emotion required for a job).

However, Brotheridge and Lee (2003) state that organisational norms about emotions, if they exist, are vague and have not yet been specified for different organizational roles, gender roles or the display of course emotions such as anger (Glomb & Hulin, 1997). Furthermore, Gibson and Callister (2010) also state that there have been no systematic efforts to demarcate differences in organisational anger contexts or a focus on how these differences influence the impact of anger episodes on individuals and organisations.

### **2.12.2 Summary of employment sector and organisation norms**

People are influenced by the social context in which they operate. Cultural norms, organisational values and local emotion display rules determine whether expressed anger is socially acceptable and whether the effects will be positive or not. Some expressions of anger may be encouraged and tolerable in some occupations but inappropriate in others. Where anger is appropriate or expected the cognitive and emotional effects of anger may be less severe than where it is not expected (Miron-Spektor & Rafaeli, 2009). Thus, examining anger incidents in different employment sectors will help to gauge if norms within sectors have an effect on anger incidents.

## **2.13 GENDER**

*Hell hath no fury like a woman scorned*

*(Unknown)*

### **2.13.1 Males and females and anger incidents?**

Studies on anger and gender in general have provided some conflicting results. With regards to the causes of anger, Averill (1982) found no differences in the events that caused anger. Women were found to be just as sensitive to unfair treatment, to unwarranted threats to their self esteem and to negligence or lack of consideration on

the part of others. In response to such provocations women were just as likely to express their anger as openly as men and there were no differences found in the level, frequency, intensity or tendency to express anger (although women did report crying more). Furthermore, recent research suggests that male and females do not experience specific real-time emotions with different strength or frequencies (Barrett, Robin, Pietromonaco & Eyssell, 1998 and Kring & Gordon, 1998 cited in Fisher, 2002a). In addition, most studies have found minimal or no differences in the experience or expression of anger between men and women (Gibson & Callister, 2010).

### **2.13.2 Differences in gender**

However, according to the biological argument, males of most primate species are more aggressive than female, and in humans, a similar pattern has been observed cross culturally (Lorenz, 1966 as cited in Thomas et al. 1998). Thomas et al. (1998) describe the construct of the 'self-in-relation' to explain the organisation and development of women's self around forming and maintaining relationships, which could explain why women are less aggressive than men. For instance, in Thomas et al.'s (1998) study on women's description of anger episodes at home and at work, women tried to restore relationships and not to exact revenge. Thus, feeling connected to others is said to be fundamental to a woman's wellbeing. Hence, self in relation theory is said to fall within the essentialist perspective on gender, in which attributes such as "giving primacy to nurturance and connectedness are essentially feminine, possibly even biologically based" (Thomas et al. 1998 pg. 319).

### **2.13.3 Societies influence on women's anger**

An alternative understanding to the biological and essentialists perspectives of gender is constructionism (Thomas et al. 1998). This proposes that gender is not a trait of the individual but a social construction, and qualities that are related to gender, are in fact, contextually determined. As Thomas et al. (1998) propose "Society has done a superb job of assigning them the tasks of preserving relationship harmony, even if needs of the self – and feelings such as anger – must be set aside in the process" (pg 320). Jack (2001) also proposes that women are influenced by their social contexts when it comes to expressing anger. Women's anger is viewed more harshly than that of men, and women who express anger tend to receive derogatory labels such as shrew, bitch and

other offensive epithets (Lerner, 1985 as cited in Thomas et al. 1998). Furthermore, women who suppress anger or use ‘self silencing’ in response to anger, are said to have been affected by the enormous pressure society has put on them to be “‘perfect girls’ – quiet, calm and kind” (Thomas et al., 1998, pg. 312).

#### **2.13.4 Perceptions of angry men and women in general**

The gender of the angry person may also have an effect on other people (Miron-Spektor & Rafaeli, 2009). Anger is considered to be gender consistent for men but not for women; that is, anger enhances masculinity for men but detracts from the femininity of women. Gibson and Callister (2010) have also stated that any differences thought to exist between men and women are to do with the actual motivation for anger, and that women are more concerned with the negative consequences of anger, while men are less concerned with the consequences and think that expressing anger will help maintain power and status. Furthermore, men are said to express anger in order to exert dominance and control over the environment, whereas anger in women is said to convey a loss of self-control. As such anger expressed by women is more likely to provoke negative emotions and attitudes from other people than anger expressed by men.

##### ***Perceptions at work of men and women who express anger at work***

Further support for such beliefs has been found in other studies. For instance, Brescoll and Uhlmann (2008, cited in *HRM Guide*, 2008) report of a study carried out on the differences in attitudes towards men and women who express anger at work. It was concluded that anger expression tended to be accepted or rewarded in men while women were judged as less competent. The authors concluded that “an angry woman loses status no matter what her position...Whether you are running for president or looking for a clerical job you cannot afford to get angry if you are a woman” (*HRM Guide*, 2008, pg. 1)

##### ***Perception of women leaders who express anger at work***

Furthermore, Lewis (2000) states that these normative beliefs are likely to exist in the workplace and propose that the stereotypical belief that women should not express anger may be even stronger at work than other social contexts, especially for leaders.

Lewis' (2000) study found that the expression of negative emotion had a negative effect on the assessment of leader effectiveness compared to a more neutral emotional display. Furthermore, male leaders received lower effectiveness ratings when expressing sadness compared to neutrality, while female leaders received lower ratings when expressing either sadness or anger. Hence, it would in this study that anger expression was more acceptable for men at work than women, and women leaders who expressed anger were rated less effective than women who expressed no emotion.

***Perception of males and female leaders who express anger: females rated higher than males***

However, inconsistent with these findings Glomb and Hulin (1997) found that female supervisors who expressed anger received higher ratings than male supervisors. This is counter to some of the research on anger and gender differences but is consistent with some research that says that women supervisors are evaluated more positively than male supervisors in some conditions. As Glomb and Hulin (1997) propose, people's perceptions about male and female leaders are different; they attribute this perception to the 'dancing bear' and 'talking platypus' phenomena. Apparently, it is so remarkable that a woman can be a supervisor that her ratings are inflated, much as one would be amazed at a dancing bear or a talking platypus; how well the bear dances or what the platypus says is not important, the wonder is that the bear can dance or the platypus can say anything at all.

**2.13.5 Women and anger expression**

In order to discover what elements of anger expression women identify as most salient in their anger experiences, Jack (2001) undertook a qualitative study with 60 women. Jack (2001) discovered that women's decisions of how and where to express anger is most strongly influenced by the anticipated reactions of others, and revealed six patterns of anger expression which focused on whether they bring anger into the relationships or keep it out: positively and directly; aggressively; indirectly; consciously and constructively; explosively but alone, and self-silencing. These are mentioned in more detail below.

Jack (2001) found that if women bring anger into relationships they bring it in positively and directly in order to “right an inequity or violation or both” so as to “clear the air” (pg 391). Hence women aim to regulate their social relationships by putting right a problem or violation by addressing the offender directly. Bringing anger into the relationship positively and directly gives women a positive sense of well-being, positive self-regard and empowerment, particularly if the anger expression resulted in positive effects. Interestingly, women who chose to express anger in this way also felt that they were socially equal to the offender, which gave them the confidence to express their anger in such a way, as they did not fear reprisal.

Women also brought anger into the relationship aggressively in order to hurt someone or to retaliate; they did so verbally or physically, yet women who acted in this way were rarely left with a sense of well being. In addition women brought anger into relationships indirectly in order to bring anger into the relationship but keep it disguised. Jack (2001) identified four strategies for what have been identified as safe expression of anger: quiet sabotage, hostile distance, deflection and loss of control. Such strategies allow women to deny their anger and avoid the potential negative consequences of expressing anger. However, when anger is brought into the relationship indirectly, because of fear of the consequences, women report continued incitement of anger as well as feelings of guilt and low self esteem.

Alternatively women kept anger out of relationships consciously and constructively. In this way, women deliberately chose not to express their anger and instead redirected it into positive action. This is said to protect the women, either physically (e.g. not being assaulted by a partner) or economically (e.g. not being fired from a job) and results in the women feeling positive about her actions. This shows that expressing anger in such a way can be more beneficial than harmful (Averill, 1982). Finally, women express anger explosively but alone, and through self-silencing. Women who express anger explosively release their anger by shouting, hitting objects or crying but do so out of anyone’s presence, as they fear others’ responses. However, Jack (2001) reports that this limits anger’s positive function which is to regulate social relationships and keep them fair and balanced. By using self-silencing, women try to project an image of happiness and do not allow their anger to come into the relationship, either directly or indirectly. In effect, they try to deny its existence and see anger as “selfish and bad or as dangerous to relationships” (pg 395). However, using self silencing has been found to

carry negative health consequences such as depression, eating disorders, and irritable bowel syndrome (I.B.S).

### **2.13.6 Women's anger and its consequences**

Averill (2000) points out that the feminists argument is that women are quite capable of experiencing anger (i.e. in a biologically sense) but that they are repressed from doing so by power inequities within a patriarchal society. As a consequence, Averill (2000) proposes that women are likely to experience and express anger in indirect and often self-defeating ways, which may lead to lethargy and depression. Indeed, most studies on anger and health have looked at the relationship between males and the consequences of experiencing and expressing or suppressing anger. However, Jack (2000) suggests that women's expression and suppression of anger has been linked to health consequences, such as depression, hypertension and cardiovascular disease and irritable bowel disease and suicide.

Furthermore, Garrison's (1995, cited in Thomas et al. 1998) study illuminated two distinct types of women's anger experience with very different consequences: a violent, intense, all consuming experience (for women with cardiovascular disease) and a tight, heavy, inner turmoil (for women with breast cancer). The women with breast cancer proved unique because 70% had trouble recalling anger incidents, and only 30% could think of more than four anger episodes in their entire lives. When angry, expressing their feelings brought no relief and resulted in self blame and a need for reconciliation with the other person. In contrast, the cardiac patients had an almost compulsive need to act and after their outbursts they usually felt better and were unconcerned about reconciliation. Nonetheless, both groups saw anger as a negative feeling.

### **2.13.7 Summary of gender**

Anger and gender has been investigated immensely in past studies and the results are mixed. However, what seems apparent is that women are less likely to express anger due to social rules. Indeed, Jack's (2001) study illustrates that women often find themselves in a bind regarding anger expression. Social rules allow those with more social power and dominance to more openly display their anger than those who are less powerful. Following the hierarchy of gender in our society, men have much more



power than women to express anger both publicly and privately. Thus, women have less freedom to overtly express anger and more often fear reprisal after showing anger than do men, even when holding management positions.

## **2.14 DISPOSITIONAL ANGER**

*If you do not wish to be prone to anger, do not feed the habit; give it nothing which may tend to its increase*

*(Epictetus)*

### **2.14.1 Trait anger and job satisfaction**

Two factors which will be included in the conceptual framework but will not be investigated until study two: the anger diaries (as established measures already exist) are trait anger and job satisfaction. These two factors will replace dispositional affect and work attitudes in AET, as previous research has shown that they may be related to anger. Reasons for including them in the research are described below.

### **2.14.2 AET and individual differences**

According to AET, events that occur at work and lead to emotional reactions not only depend on the work environment but also individual differences or more specifically the dispositional affect of the individual (Grandey et al. 2002). Furthermore, AET proposes that the affective disposition of the individual will not only affect emotional reactions but that, in turn, these will affect the judgement-driven behaviours of workers via work attitudes.

Support for this was found by Fisher (2002b) who discovered that average affect (mood and emotion) was predicted by the affective disposition of workers. Dispositional positive affect was a strong predictor of real time positive affective reactions, and negative affectivity was a significant predictor of negative affective reactions. In addition, positive and negative affective reactions while working were related to overall job satisfaction. Grandey et al. (2002) also found that trait positive affect was positively related to positive emotions experienced at work over a 2 week period and trait negative affect was positively related to negative emotions experienced at work over a 2 week

period. These studies have highlighted the fact that an individual's response to an event is influenced by the individuals' propensity to experience positive or negative emotions. However, using measures of dispositional affect when exploring discrete emotions, such as anger, may be unsuitable and there may be other measures more appropriate for measuring associations of individual differences with anger.

#### **2.14.3 Clues as to why trait anger may predict more anger**

Previous research into anger suggests that individuals high in trait anger (i.e. the propensity to become angry) are more likely to experience more frequent and intense day-to-day anger across a wide variety of situations (Deffenbacher, 1992, as cited in Fox & Spector, 1999). It has thus been suggested that employees high in trait anger could respond to a wider range of organisational constraints with behavioural expression (Fox & Spector, 1999).

#### **2.14.4 Expression and suppression of anger relation to personality**

Martin, Wan, David, Wegner, Olson and Watson (1999) also propose that as well as situational and appraisal determinants, that personality has an effect on anger-provoking episodes, and will determine if anger will end up in expressive behaviour or not. For example, the authors found that anger-in (the tendency to experience but suppress the overt expression of anger) and anger-out (the tendency to overtly express anger, typically in negative, aggressive ways) were primarily associated with Neuroticism and Agreeableness respectively (i.e. two of the dimensions found in the five-factor model of personality). Neuroticism is the tendency to experience negative emotional states, such as, anger, anxiety, guilt and depressed mood and Agreeableness is a tendency to be compassionate and cooperative and value getting along with others. Martin et al. (1999) reported that Anger-in was positively related to somatic complaints but failed to predict symptoms after controlling for Neuroticism, and Anger-out was positively associated with both somatic complaints and self-reported health behaviours, even after controlling for Neuroticism and Agreeableness. Furthermore, Anger-in was associated with a general tendency to be emotionally inexpressive, whereas anger-out was more specifically related to the expression of angry emotions. Thus, the study shows that anger-in and anger-out is associated with suppression and expression of anger. However, it also suggests that other dispositional characteristics of the individual may

be associated with the suppression of anger and the individual's subsequent somatic complaints and symptoms, and not just whether the individual has a tendency to suppress anger in general.

#### **2.14.5 High trait anger and overt expression and negative consequences**

Deffenbacher, Oetting, Rebeckah, and Morris (1996) reported that although some studies have reported that individuals with higher levels of anger-in were more likely to have elevated physiological responses in angry situations, research has not determined if specific forms of anger expression should lead to different types of consequences.

In addition, Deffenbacher, et al. (1996) state that research on trait anger has found that individuals high in trait anger experience negative consequences more frequently and that the consequences of their anger are likely to be more severe. This in turn, could have an influence on the types of interventions used (Denoos & Deffenbacher 1995 cited in Deffenbacher et al. 1996) as different forms of anger expression may lead to different consequences.

In order to try to unravel the associations between trait anger, anger expression and the consequences of anger expression, Deffenbacher et al. (1996) looked at the frequency an individual's anger led them to experience commonly occurring anger consequences (e.g. getting into a verbal or physical fight, damaging property, feeling guilty) and related them to a person's trait anger level and typical forms of anger expression and found some interesting results.

Firstly, Deffenbacher et al. (1996) found seven types of anger expression. Four were aggressive expressions of anger (two being verbal in form and two being physical in form), two were non-aggressive forms of anger expression (assertive, problem-oriented communication or appropriately leaving the situation) and one was anger expressed in a direct and forthright manner, which was done in either an aggressive or non-aggressive form. Secondly, these types of anger expression formed positive and negative correlations with trait anger, with trait anger correlating negatively with calm, prosocial forms of anger expression, and positively with verbal and physical aggression forms of anger expression. Thirdly, with regards to anger related consequences, different forms of expression were related to different outcomes. Specifically, aggressive forms of

anger expressions were positively correlated with adverse anger outcomes, whereas non aggressive expressions were negatively correlated. Different forms of anger expression were also predictive of specific types of consequences, further suggesting that they are distinctly related to anger outcomes. For example, 'Physical Assault People' formed the strongest relationship with the frequency of physical fights, whereas 'Verbal Assault' and 'Noisy Arguing' were more predictive of getting into 'Verbal Fights'. Finally, it was found that high trait anger individuals were likely to have higher levels of nearly every type of negative consequences, and anger-in was related to experiencing negative emotional consequences, such as, depression and embarrassment as a result of anger.

### ***Summary of results from Deffenbacher et al.'s (1996) study and future management of anger***

Results of the study carried out by Deffenbacher et al. (1996) show that trait anger was important in predicting negative consequences, but also that the form of anger expression largely determined the type of consequence that was likely to occur. Thus, Deffenbacher et al. (1996) suggest that the the form of anger expression might be an important factor for intervention. For example, social communication skills interventions might be most appropriate for individuals whose form of expression was dominated by noisy arguing and verbal assault. However, physical assault to people and objects may respond better to interventions that involve overlearning (i.e. learning a new skill until the individual has acquired automaticity as the result of learning, repetition and practice) of arousal reduction techniques, use of time out and response disruption strategies. In addition anger-in was related to anxiety, so interventions may include both techniques for reduction of anger and anxiety. Thus, Deffenbacher et al.'s (1996) study highlights the importance of trait anger on not only the expression of anger, but also the consequences of anger incidents, and that this can have an effect on how anger is managed.

#### **2.14.6 Trait anger more appropriate for measuring anger incidents**

The previous study carried out by Deffenbacher et al. (1996) is unusual as it has used trait anger to measure its association with the expression of anger and the subsequent consequences of anger. However, previous research has tended to examine anger and aggression with negative affect rather than trait anger (Gibson & Callister, 2010), which

would probably be more appropriate for studying anger at work. In support of this, it is argued that trait anger is distinct from negative affect. For instance, Douglas and Martinko (2001, as cited in Gibson & Callister, 2010) found an effect of trait anger but not negative affect on aggression, and proposed that individuals high in negative affect are more likely to be targets of aggression rather than aggressors. Furthermore, Domagalski and Steeman (2005, as cited in Gibson & Callister, 2010) state that when trait anger was used as a moderator of experienced and expressed anger, that it was significantly related to the outward expression of anger, particularly when workers were in the presence of supervisors and coworkers (but not subordinates).

#### **2.14.7 Summary of dispositional anger**

Although individual differences have been proposed to play a role in anger incidents, this has not yet been accounted for in a study of on-going anger at work. Fitness (2002) suggests that researchers should consider the effects of individual differences on various features of workplace. Previous research has tended to investigate anger and its association with individual differences using measures of affective disposition (trait positive and negative affect). However, it is thought more appropriate to use measures of trait anger to explore whether an individual's propensity to become angry will have an effect on their experience, expression and subsequent consequences of anger.

### **2.15 JOB SATISFACTION**

*No one can think clearly when his fists are clenched*

*(George Jean Nathan)*

#### **2.15.1 Measuring job satisfaction**

Affective Events Theory (Weiss & Cropanzano, 1996) proposes that cumulative experiences of affective events may eventually lead to changes in work attitudes such as job satisfaction. This, in turn, may lead to judgment-driven behaviours such as quitting. Hence, measuring job satisfaction provides researchers with a broader understanding of how situations can affect the feelings and subsequent behaviour of employees. In order to measure job satisfaction, one would assume that since it is an affective response to one's job, that measures would incorporate affective components probably more so than

cognitive components; however, the opposite seems to be the case. Indeed, a growing amount of conceptual and empirical work suggests that much of the theorising and research on job satisfaction has tended to focus more on the cognitive component as opposed to the affective component (Brief & Robertson, 1989; Fisher & Ashkanasky 2000; Miner, Glomb & Hulin, 2005), yet AET suggests, that the cumulated affect experienced while working contributes to the latter component (Fisher 2002b).

### **2.15.2 What is job satisfaction?**

Balzer et al. (2000) define job satisfaction as the feelings a worker has about his or her job or job experiences in relation to previous experiences, current expectations, or available alternatives. However, people not only have an overall or global feeling of satisfaction about their work, they also feel differently about various aspects of their job. Employees' satisfaction with their jobs offers important clues concerning the health and profitability of an organisation, and measures of strengths and weaknesses tell researchers and managers where improvements can be made.

### **2.15.3 Why are researchers and managers interested in job satisfaction?**

Balzer et al. (2000) propose that there are three reasons why researchers and managers are interested in job satisfaction: Humanitarian, economic and theoretical concerns. According to Balzer et al. (2000), humanitarian concerns deal with the simple principle that management prefer people to be satisfied with their jobs. Concerns over the economic situation of an organisation are said to establish whether management are willing to invest time and money to increase satisfaction. Job satisfaction is said to be related to work behaviour; thus increasing satisfaction may help the organisation in areas such as reducing absenteeism and decreasing turnover. In addition, job satisfaction has been related to stress and conflict amongst employees, which may affect productivity; thus by improving satisfaction, organisations can reduce costs associated with lower productivity (e.g. hiring and training new employees and health insurance claims). Finally, for many theorists, job satisfaction is seen as a direct cause of behaviour, such as attending work or collaborating with colleagues, while for others it is said to be a consequence of such behaviour as the behaviour leads to rewards from the supervisor or the work itself, which in turn leads to satisfaction.

#### **2.15.4 Job satisfaction and affect are distinct constructs**

Theoretical concerns over job satisfaction have been identified with AET. In deed, the genesis of Affective Events Theory (AET) is based in part on the realisation that affect and emotions are not the same as job satisfaction (Ashkanasy et al. 2002). Support for this view is also given by Wegge, Dick, Fisher, West and Dawson (2006) who state that the most basic assumption of AET is that job satisfaction should be conceptualised as an evaluative judgement about one's job. AET states that an evaluative judgement regarding the job in general or a job facet should not be confused with real emotions or moods that employees experience at work, and states that moods and emotions have causes and consequences that are distinct from the causes of evaluative judgements. Thus, job satisfaction and affect are said to be distinct constructs, empirically and theoretically, and should be described and studied in such a way (Ashkanasy et al. 2002).

#### **2.15.5 Job satisfaction measures and their cognitive and affective components**

The affective and cognitive components of job satisfaction have been examined by Brief and Roberson (1989). They tested three commonly used measures of job satisfaction: the Job Description Index (Smith, Kendall & Hulin, 1969 as cited in Brief & Roberson, 1989); the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England & Lofquist, 1967, as cited in Brief & Roberson 1989) and various faces scales. They found that only the faces scale captured the affective and cognitive components about equally and that the other two measures mostly tapped into the cognitive components. From this Brief and Robertson (1987) concluded that job satisfaction generally is interpreted in affective terms, but normally only its cognitive aspects are measured (Brief, 2002).

Fisher (2002b) also carried out research in order to examine the cognitive and affective components of job satisfaction measures. Fisher (2002b) proposed that momentary affect (real-time mood and positive and negative emotions) while working would be associated to standard measures of overall job satisfaction using the Job In General (Ironson, Smith, Brannick, Gibson & Paul, 1989, as cited in Fisher, 2002b); the Quinn and Staines (1979, as cited in Fisher, 2002b) Facet Free Job Satisfaction Scale and an 11 point faces scale (Kunin, 1955). Fisher (2002b) found, as expected, that the correlations between average affect and job satisfaction were significant; however, a one item faces

measure (Kunin, 1955) of overall satisfaction was found to capture greater affective variance. From these findings, Fisher (2002a) suggests that job satisfaction and momentary affect while working are related, but are not the same, and that standard verbal measures of overall satisfaction are not all that good at measuring the affective experience of work. Fisher (2002a) proposes that researchers wishing to measure both affect at work and cognitions about work should consider using faces measures or supplementing standard measures with separate scales designed to assess affect.

Another study carried out by Fisher (2002a) looking into the causes and consequences of real time affective reactions at work also highlights the fact that job satisfaction measures may be tapping into the cognitive component too much. Fisher (2002a) measured both positive and negative affective reactions over a 2 week period and job satisfaction (using the Job In General). Contrary to expectations Fisher (2002a) found non significant results. Fisher (2002a) initially suggested that the relatively stable attitude of job satisfaction is influenced by average affect over a longer period of time and that the 2 week ESM period used in the study was simply insufficient to capture this effect. However, she also proposed that the fault may lie in attitude measures that tap cognitions to a much larger extent than affect.

With regards to affect and measures of job satisfaction, Fisher (2000) has proposed that it may be useful to think of job satisfaction instruments as lying on a continuum from primarily assessing the cognitive component of job attitudes to assessing a combination of cognitive and affective components. Fisher (2000) found that the JDI facet scales seem close to the cognition end of the continuum. The JIG and Quinn and Staines Facet Free measures may be further along the continuum toward overall attitude and the faces scale comes closest to an overall evaluative judgement in that it taps both affective and cognitive components to a reasonable degree.

#### **2.15.6 Summary of job satisfaction**

The role of emotion at work has been thought to play an important part in affecting work attitudes, especially with regards to job satisfaction (Grandey et al. 2002; Fisher, 2002b). Although research has tended to use positive and negative emotions to explore relationships between emotions and job satisfaction, research does suggest that episodic and chronic anger is negatively related to job satisfaction (Gibson and Barsade, 1999;



Fisher, 2002b). As job satisfaction is thought to be related to other behaviours, such as turnover and productivity, future research is certainly warranted into anger and its relationship to job satisfaction and subsequent behaviour (Fisher, 2002b). Furthermore, the implications of previous research on job satisfaction measures are that verbal measures of job satisfaction measure affect only to a limited degree. Therefore, Fisher (2000) suggests that assessing job affect as a separate construct to job satisfaction may be beneficial. Accordingly, to more fully understand individuals' experiences of work and to best predict behaviour, Fisher (2002a) suggests that it may be more beneficial to assess both job satisfaction and affect while working by using a verbal measure of job satisfaction and a visual measure too.

## **2.16 THE IMPORTANCE OF SAMPLING IN STUDY ONE: THE INTERVIEWS**

As research suggests, the above factors, source, context, employment sector and gender may have a great influence on the causes, characteristics and outcomes of anger incidents. Therefore, in order to make sure that a wide variety of data is gathered on anger experiences in study one: the interviews on workplace anger, information on workers' internal interactions (i.e. between colleagues) and external interactions (i.e. anger experiences with people outside of the organisation: customer, clients, suppliers, students and patients) will be collected. Furthermore, information from internal sources of anger incidents will be collected from all levels (i.e. anger experiences with supervisors, co-workers and subordinates). Finally, the investigation of anger incidents will involve male and female participants from a wide variety of employment sectors and include individuals from the non service sectors as well as the service sectors. Including the above factors in the framework is essential at this stage as they will provide the foundations for the building of the theoretical model. Furthermore, finding out about anger incidents from a wider group of people will not only enhance generalisability, (although this is often thought inappropriate in qualitative studies) but it will also enable anger incidents to be investigated in different instances, in different places, with different people.

## **2.17 SUMMARY OF FACTORS INCLUDED IN CONCEPTUAL FRAMEWORK**

The empirical research to date has thus been important in a number of ways. Firstly, it has allowed for a deeper insight into the causes of anger and how workers react to anger, i.e. if they express, suppress or control their anger and subsequently fake emotions. Certain characteristics have also been identified with regard to the duration of anger, its frequency and intensity. Furthermore, with regards to the consequences of anger at work, research has shown that workers' behaviours and feelings may be greatly affected by anger incidents. In addition, it has been recognised that chronic anger may affect some workers and that this may differ from short-term anger and have its own causes, characteristics and consequences. Also, researchers have highlighted other factors, which may be linked to anger such as trait anger and job satisfaction. Finally, it has been suggested that the experience of anger may be affected by the source of the anger incident and the context of the incident, such as the power relationships between the offender and angry person of the anger incident, the organisational norms within which individuals operate and gender of the angry person. Despite the progress made with research into anger, more information is needed in order to develop a theoretical model. This will incorporate the unfolding process of anger incidents, and will enable the development of an appropriate instrument to measure anger in real time, over time.

## **2.18 SUMMARY OF THE AIMS OF THE OVERALL STUDY**

In order to carry out the research, mixed methods will be used, incorporating qualitative and quantitative data collection methods and analyses. In order to accomplish this it will be necessary to carry out the research in two separate studies. These are described below. Mixing methods in such a way can be valuable to exploratory research. As Miles and Huberman (1994) state, "Qualitative data can help the quantitative side of the study during design by aiding with the conceptual development and instrumentation" (pg. 41) and so helps the researcher understand the case at hand. In such a way, the initial exploratory work will aid in the development of the theoretical model and subsequent development of the anger diary, which will lead to a more systematic approach to collecting and analysing data on anger at work.

## **2.19 STUDY ONE: THE INTERVIEWS**

In study one: the interviews, a conceptual framework will help guide the researcher in the qualitative research and ensure that the essential information on participants' experiences of anger at work can be gathered, specifically looking at the causes, characteristics and consequences of anger incidents. The analyses from the interviews will then enable the researcher to expand the conceptual framework and develop a theoretical model. This will subsequently aid in the development of a quantitative measure of anger for the event contingent diary which will enable certain elements of the model to be tested. This methodology has not yet been applied to anger alone. Therefore, the data collected from this present study will provide the items for an event contingent diary, enabling the prevalence of anger to be assessed in 'real time' as well as investigating the antecedents and outcomes of such events.

Given the weakness of our current understanding of anger at work, questions, rather than specific hypotheses were employed to guide the first part of the present research. All the questions relate to the conceptual framework in figure 2. So while previous research into anger at work has begun to increase there still remain many questions to be asked. Nonetheless, the research previously mentioned together with the conceptual framework provides a point of departure for the development of a theoretical model.

### **2.19.1 Study 1 – Aim 1**

In order to develop our knowledge on anger at work further, this research will try to identify the specific causes of workplace anger.

### **2.19.2 Study 1 – Aim 2**

In order to study the characteristics of incidents the frequency, duration and intensity of anger incidents will be examined in study one: the interviews. In addition, the expression, suppression and control of anger incidents will also be examined, and the motives for expression and suppression of anger will also be examined. In particular, the emotional and behavioural reactions to the anger incident together with the faking of anger in response to such incidents will be investigated.

### **2.19.3 Study 1 – Aim 3**

In order to examine the consequences of angry incidents, workers' behaviour and constituent emotions after the incident, both in the short-term and long-term will be investigated in study one: the interviews on workplace anger. In addition, workers' experiences of feeling chronically angry will be explored in order to find out more about chronic anger and its causes, characteristics and consequences.

### **2.19.4 Study 1 – Aim 4**

Other factors related to the experience of anger at work will be examined, such as, incident resolved and social support, to see how they will fit into the framework and subsequent model.

## **2.20 EMERGENT THEMES**

In addition to the aims above the researcher will try to discover if there are any other aspects of the anger incident which affect its occurrence or outcome. As Miles and Huberman (1996) state, when collecting and analysing data on people's experiences, it is beneficial to keep an open-mind to see if any emergent themes arise out of the data or any patterns can be found.

## **2.21 STUDY 2: THE ANGER DIARIES**

In study two: the anger diary, the theoretical model will enable the development of an event contingent anger diary to measure anger incidents using Experiencing Sampling Methodology (ESM). Participants will be asked to complete self-report measures each time they experience an anger incident. These measures will be presented to male and female workers in different employment sectors, to workers holding managerial and non-managerial positions and to workers who experience anger from different sources. Other factors thought to be related to anger incidents will be examined, including the influence of trait anger on anger incidents, and the effects of anger incidents on job satisfaction.

## **2.22 ETHICAL APPROVAL**

Ethical Approval was obtained from UCLAN School of Psychology Ethics Committee for the following study (see appendix 1) In addition, the approval of Preston, Chorley and South Ribble NHS Trust Research Committee, an essential condition of access to employees, had been sought and obtained prior to the start of the study (see appendix 2).

## **CHAPTER 3**

### **METHOD FOR STUDY ONE: THE INTERVIEWS**

#### **3.1 RESEARCH METHODS AND DESIGN**

This exploratory study aimed to further fundamental knowledge about the phenomenon of anger at work. In order to do this, qualitative research and analysis was undertaken for study one: the interviews, so that a quantitative measure could be developed for study two: the anger diaries. Qualitative data, using explorative in-depth interviews, are often used to develop quantitative measures and scales, as insights from qualitative data help researchers to design instruments that are more sensitive to participants' meanings and interpretations (Coyle & Williams, 2000). Also, when theory and data are scarce, then producing items for a questionnaire by the use of qualitative data is seen as a viable option. Questionnaire construction is one of the most delicate and critical research activities, and although qualitative research is extremely time consuming, the questionnaire items are strengthened by being grounded in interviews. In order to develop items for a questionnaire the multiple case study design was chosen for this study, which included using in-depth interviews, NVivo software, (version 1.3) and a researcher's log (see data analysis section below).

#### **3.2 PARTICIPANTS**

Recruitment of participants began once ethical approval had been granted from the ethics committee at the University of Central Lancashire. After contacting many organisations and companies, several organisations agreed to take part in the study, representing four different employment sectors: health, education wholesale and retail.

A judgement sample was employed for the one to one interviews. Such samples consist of participants known to be typical of the participants who will be questioned in the main survey; exact representativeness is not necessary but rather a good spread of respondent characteristics (Oppenheim, 2001). Variety in the sample also increases the range of views available for exploration and enhances the depth of understanding achieved (Glaser & Strauss, 1967 as cited in Henwood, 2002).

In order to recruit participants, letters were written to H.R. managers within organisations from different sectors. In addition, letters of request were also sent to the local Fire Service, the local Police Headquarters, the Head Offices of supermarket chains and the main Airline companies. In addition, contact was made with the Head teachers of local Primary and Secondary schools, Colleges and Universities.

After many weeks of trying to recruit participants, two large organisations agreed to part from the wholesale and retail sector. It was agreed that the Human Resources managers from these two large organisations would invite the participants to take part in the study on behalf of the researcher. Although this was more work for the Human Resources managers, they felt that they would be able to choose the members of staff that would be willing to speak about their experiences of anger at work. Recruiting participants in this way could have resulted in biases; for example, managers may have deliberately chosen people who were always angry or chosen people who they thought may have been quite reserved in their experiences of anger at work, so as not to give the company a bad image. However, it was explained that a good mix of participants was needed to obtain a variety of responses so that anger at work could be explored from a variety of perspectives. It was explained to Human Resources managers that the participant would need to be in a full time position, and that there needed to be an equal split of employees holding managerial and non-managerial positions.

As it had proved difficult to recruit participants from sectors via H.R. managers, the researcher recruited the remaining participants directly from the health and education sector. Therefore, after permission was granted from the appropriate person within each organisation, posters (see figure 3 below) were used to recruit participants from particular organisations, within the health and education sector. This took the onus off managers who had to try and recruit participants within their busy schedule. These posters were displayed on notice boards within Primary and Secondary schools, Colleges, Universities and organisations within the health sector. Permission was also granted to include the advertisement in internal newsletters to employees within certain educational establishments. Hence, this enabled the recruitment of the necessary participants from the health and education sector.



Participants required for one to one informal interviews to gain insight in to your

**EXPERIENCES OF ANGER AT WORK.**

This is strictly a research project. If you decide to take part, you will be agreeing to participate in an important study where your experiences, opinions and feelings will be of particular value.

Complete **confidentiality** is assured.

If wish to chat to me further about the study or arrange to meet please contact me.

Jill Booth  
PhD student  
Department of Psychology  
University of Central Lancashire

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Tel. No.: 01772 894464

Figure 3: Poster to recruit participants for study one: the interviews

The final sample consisted of 24 currently employed men and women in full-time work: 10 males and 14 females. Twelve of the participants were in management positions and 12 were in non-management positions, and there were six participants interviewed from each of the four employment sectors (three in management and three in non-management). Again, as power differences will be investigated at a later stage it was important to include individuals holding management and non-management positions. Although time constraints primarily influenced the number of participants interviewed, recruitment of participants ceased when it was judged that the variety of anger experiences documented in interviews gave sufficient depth and breadth to the research. No person was excluded or withdrew from the research (see table 1 for a summary description of participants and demographic information. Pseudonyms are used).



Table 1: Summary of participants and demographic information

PSEUDONYM	SEX	SECTOR	POSITION	OCCUPATION
Peter	M	Health	Management	Clinical Psychiatric Nurse
Andrea	F	Health	Management	Clinical Manager for Oncology Directorate
Debbie	F	Health	Management	Child Nurse
Susan	F	Health	Non-Management	Diabetic Paediatric Nurse
Jayne	F	Health	Non-Management	Staff Nurse
Steven		Health	Non-Management	Community Psychiatric Charge Nurse/Practice Counsellor
Robert	M	Education	Management	Secondary: Head of English & Media Studies
David	M	Education	Management	Primary: Key Stage 3 Co-ordinator
Ann Marie	F	Education	Management	Primary: Key Stage 1 Co-ordinator
Paul	M	Education	Non-Management	Primary: Year 6
Helen	F	Education	Non-Management	University: Lecturer
Jenny	F	Education	Non-Management	University: Senior Administrator
Laura	F	Retail	Management	Clothes Dept. Manager
Marlena	F	Retail	Management	Check-out Manager
Martin	M	Retail	Management	Manager Replenishment
Cath	F	Retail	Non-Management	Trainee Manager
Sylvia	F	Retail	Non-Management	Shop Floor
Barry	M	Retail	Non-Management	Butcher
Liz	F	Wholesale	Management	Admin Manager
Adam	M	Wholesale	Management	Buying Manager
Joe	M	Wholesale	Management	Warehouse Supervisor
Mike	M	Wholesale	Non-Management	Transport De-briefer
Hayley	F	Wholesale	Non-Management	Transport Services Clerk
Katie	F	Wholesale	Non-Management	Customer Services Administrator

### 3.3 MATERIALS

#### 3.3.1 Interview schedule

In an interview, interviewees can bring in their own ideas, issues and subjective feelings that may have been overlooked if a researcher is just using existing research on an area to develop such questions (Sullivan, 2000). In addition, open-ended questions enable participants to raise previously unidentified questions and issues (Allen & Carlson, 2003). The design and format of the semi-structured interview schedule included open-ended questions about participants' personal experiences of anger at work. First participants were asked general questions about their experiences of anger at work followed by more specific questions, such as, who else was involved in the incident and

what the participant thought and felt at the time. The questions related to their current employment or recent and previous employment. (See appendix 3 for a copy of the in-depth interview schedule).

### **3.4 PROCEDURE**

#### **3.4.1 Data collection**

Twenty-four individual in-depth interviews, lasting between 30 minutes and 1-½ hours, were undertaken in a place chosen by the participants. In total there was approximately 22 hours of recordings. Twelve participants attended the interviews in a private room in their place of work; six participants agreed to come to the researcher's place of work and the remaining six participants preferred the interviews to take place in their own home. One researcher undertook all of the interviews using the same interview guide thus promoting consistency in data collection. Each participant was presented with information about the study prior to the interview (see appendix 4 for a copy of the participant information sheet) and asked to sign consent forms (see appendix 5 for a copy of the consent form). Furthermore, participants were reassured that their responses were confidential and anonymous. In addition to hand written notes, the researcher, with the approval of the participants, used a laptop to record all interviews. Letters of thanks were later distributed to H.R. managers and all participants who took part in the study.

#### **3.4.2 Data analysis**

There is no single set of rules for the analysis of data from qualitative research interviews (Cassell and Symon, 1999). However, in this case, a multiple case study approach was used to assess the phenomenon of anger at work as well as to develop a theoretical model to be used in the development of quantitative measures for study two: the anger diaries. It involves analysing the data of not only one case (e.g. one group of people from one employment sector) but multiple cases (e.g. people both in management and non management positions from different employment sectors). This approach is described below.

### *A multiple case study approach to analysis*

According to Yin (1989), case studies can be used to describe, explore or explain a case. The case study allows the researcher to evaluate in-depth “how” and “why” questions (Leedy & Ormrod, 2005). Miles and Huberman (1994) go on to argue that a good causal network could be developed for one case but may not apply to a dozen cases and may result in a ‘smoothed down’ set of generalisations that may not apply to any specific case in the set, let alone others. They go on to state:

“that each case must be understood in its own terms...yet we hunger for the understanding that comparative analysis can bring ...Therefore, multiple cases provide the opportunity to not only pin down the specific condition under which a finding will occur but also help to form the more general categories of how those conditions may be related” (pg. 173).

Therefore, the multiple case study approach for the present study involved using within case and cross-case analysis procedures. According to Creswell (1998) a within-case analysis involves providing rich descriptions of categories and themes (a definition of categories and themes is provided in the next section) within the individual cases, while a cross-case analysis involves conducting analysis of categories and themes across all cases and the determination of the meanings of the cases through interpretations. In addition, Merriam (1998) states that in a multiple case study:

“From the within-case analysis, each case is first treated as a comprehensive case in itself and of itself. Data are gathered so the researcher can learn as much about the contextual variables as possible that might have a bearing on the case. Once the analysis of each case is completed, cross-case analysis begins. A qualitative, inductive, multicase study seeks to build abstractions across cases” (pg. 194).

The multiple case study approach for data analysis followed the three-step process outlined by Miles and Huberman (1994) to organise the data. This includes: (a) data reduction; (b) data display and (c) conclusion drawing. Data reduction enables the researcher to sort out the data and basically involves the on-going process of deciding which chunks of data to code (Crabtree and Miller, 1999) which to leave out and deciphering which pattern best summarises several chunks of data. Shkedi (2005) described data reduction as “the intentional selection of material in a purposeful, non-random, manner” (pg 86). Data displays, such as graphs and charts, gives the researcher a synopsis of the written text in a graphical format and are designed to bring together the relevant information into an easily accessible and compact form. Finally, conclusion

drawing involves the researcher making final decisions about the meaning of the data and trying to verify and confirm the decisions made about the data. However, it must be said that this is not a completely parallel process instead the researcher moves between data reduction, data display and conclusion drawing constantly throughout the analysis until the theoretical model is created.

Data reduction was carried out in study one: the interviews in order to analyse the transcripts and is described in the next section below. Data display and conclusion drawing was carried out subsequent to this to build the theoretical model and will be described in chapter 5: section 5.

### ***Analysis of the data using data reduction and codes***

All the interviews were transcribed verbatim. Following this the transcripts were analysed using categories, sub-categories, sub-subcategories and themes which were developed by first coding the data (see section below: *coding the data*). Categories and themes are used to analyse the data and are distinct from each other. Furthermore, they are used for different purposes in the research process, and are developed from the data using different strategies and capture different forms of knowledge (Morse, 2008). Morse (2008) describes a category as a collection of similar data sorted into the same place, thus enabling researchers to identify and describe the characteristics of the category and describe “what” the data is about. On the other hand, a theme is a meaningful “essence” (pg. 727) that runs through the data and themes describe the “how” (pg. 727).

### ***Coding the data***

In order to develop categories, sub-categories and themes the researcher used descriptive, inferential and pattern coding. Miles and Huberman (1994) state that descriptive coding involves “attributing a class of phenomena to a segment of text” (pg. 57) while inferential coding involves handling the same segment of the text in a more interpretive manner. Finally, pattern coding allows for the coding of data in a more interpretive and explanatory manner. Pattern coding typically emerges later on in the data collection. Basically, such coding techniques allow a lot of material to be pulled together and analysed and for themes to be identified. It is said to function like a

statistical ‘factor’, grouping disparate pieces into a more decisive and meaningful whole (Miles & Huberman, 1994).

Coding of data was carried out by hand and using NVivo software (version 1.3). Initially a start list of codes was created prior to coding based on previous research (Fitness, 2000) and the conceptual framework, and additional codes were added throughout analysis. Thus, once the interviews had been transcribed the researcher added reflective remarks and marginal remarks to the transcribed interviews sheets and started to add the codes to the transcribed interview sheets. From this point, codes grew in number and categories, sub categories, sub-sub-categories and themes were developed; this is what Miles and Huberman (1994) refer to as “a typically modest, data shaping exercise” (pg 155). For example, ‘Disrespect’ was identified under the category of ‘causes of anger incidents’ and examples of this category were classified as sub-subcategories e.g., ‘Overruled’, ‘Arrogance’ and ‘Rudeness’. Whenever possible, indigenous terms, that is, words used by the participants, were used to label categories and sub-categories and sub-subcategories (Allen & Carlson, 2003). For example:

**Peter: Health management**

Category: Cause of anger

Subcategory: Disrespect

Sub-subcategory: they [the offender] was rude to others

This was taken from the following statement:

Line 33 and 34: It was the anger at the way my colleagues or my wife was being treated and lack of respect for them.

**Jayne: Health non-management**

Category: Cause of anger

Sub-category: Powerlessness

This label was taken from the following statement:

Line 32 and 33: And I felt angry about what was happening to the patients but I also felt angry because I felt so powerless.

In addition to the analysis of data by hand, NVivo software (version 1.3) was used. NVivo (Richards, 1999) allows for the storage of all documents, their attributes and nodes. Nodes are the containers in NVivo for categories, codes, people, abstract ideas

or any thing that matters to the project. Nodes can be kept without organisation as free nodes or organised hierarchically in trees. The researcher can explore and browse both and move between systems coding and linking. When a segment of text is coded at a node, it is referenced to a passage of text. The researcher can then browse all data coded there, rethink and recode if need be. Both documents and nodes can have attributes whose values can represent any property, so information can be stored about any document, person or concept. Thus, using the software enabled the researcher to divide text into segments and chunks, attach codes to the chunks and easily find and display all instances of coded chunks or combinations of coded chunk (Miles & Hubermann, 1994).

### ***Researcher's log***

In addition a researcher's log was kept as recommended by Allen and Carlson (2003) and Richards (1999). This enabled the researcher to keep a record of any observations from interviews, reflections and emerging issues and thus contribute to the process of identifying categories and themes within the data. It also allowed the researcher to document construction of new categories for later coding so that a clear definition of what each category constituted was recorded.

### ***Check-coding***

Check-coding the same transcripts is said to be very useful for the lone researcher and it is suggested that code re-code consistencies of over 90% should be reached before going on (Miles & Huberman, 1994). Hence, check-coding was also carried out by the researcher in the current study. The codes, categories and emergent themes were also checked and the necessary revisions made. In addition the splitting and merging of codes and categories was also carried out if the researcher considered it appropriate. This was done with the help of the researchers log and examination of the nodes within NVivo. Examples are given below.

- **Misbehaviour** was originally a node (category) with one document, and this was merged with **Immoral Behaviour**.

- **Quit/Seriously Think about Quitting** had no documents for **Short-term Consequences** and this node was deleted. It was decided to leave this node for **Long-term Consequences**. This also fitted in AET which states that quitting tends to be a judgement-driven behaviour not an affective behaviour.
- **Burnout** was under the category of **Long-term Consequence**. However this was merged with **Stress** in the category of **Long-term Consequences**.
- **Resentment for Offender** and **Grudge** were also merged as these appeared to be similar.

Although the aim was not to lose information this had to be balanced against having too many sub categories which would have to be used for data gathering at the diary stage and thus result in too many items and overload for participants.

### 3.5 Trustworthiness of interview data

The checks for reliability and validity for qualitative research and analysis is very different from that of quantitative research using standardised methods for instance. Instead, the trustworthiness of findings is spoken about when referring to the findings of qualitative research. It is said that researchers working on their own without standardized measures may run the risk of wrongly generalizing from specific instances if they do not try carry out their research to particular standards. Therefore, the research was carried out using the suggestions of Miles and Huberman (1994) who suggest that:

1) Researchers should avoid using non-representative samples, which could lead to the researcher making generalisations from non-representatives events, which if flawed could lead to generalisations to the specific sample only.

In order to collect data from a representative sample the researcher recruited participants who held managerial and non-managerial positions from a variety of employment sectors including participants from the service and non service professions.

2) Data quality should be assessed by checking for researcher effects by making sure that most of the interviewing, when possible, is carried out in a comfortable and friendly social environment in order to reduce the researcher's "threat quotient"

The researcher made sure that when possible the participants met in a place of their choice, where there was enough privacy for them to disclose information regarding anger incidents and where they felt comfortable enough to sit and chat with the researcher for a fairly prolonged period.

3) The researcher should avoid using the "elite bias" i.e. from only using data from articulate, high status informants and at the same time avoid using data from only less articulate lower status informants.

The researcher tried to ensure that a wide variety of participants were recruited, not only from both management and non-management, but also from a variety of departments within each of the employment sectors. When dealing with a H.R. or department heads in order to recruit participants, it was stressed by the researcher that variety in the sample was an important element of gathering data on anger incidents.

4) To keep key research questions firmly in mind during interviews.

The researcher had a copy of the semi-structured interview questions with her at all times throughout the interviews.

5) That data should also be collected across the full range of appropriate settings.

As previously mentioned in point one above, data was collected from participants who held managerial and non managerial positions from different employment sectors in the service and non service professions.



## **CHAPTER 4**

### **RESULTS AND DISCUSSION FOR STUDY ONE - THE INTERVIEWS ON ANGER IN THE WORKPLACE**

#### **4.1 OUTLINE OF THE CHAPTER**

The results from study one: the interviews are presented in this chapter. This first aim of study one was to identify the specific causes of workplace anger. The second aim was to identify the characteristics of anger incidents. This involved exploring the frequency, duration, and intensity of anger incidents and behavioural and emotional reactions of participants when they either expressed, suppressed or controlled their anger during anger incidents. In addition, faking of emotion in reaction to anger incidents was also explored. The third aim was to examine the consequences of anger incidents by examining workers' behaviour and constituent emotions, both in the short-term and long-term. In addition, workers' experience of feeling chronically angry was explored in order to find out more about chronic anger and its causes, characteristics and consequences. The fourth aim was to investigate there were other factors related to the experience of anger at work, such as the workers' perceptions as to whether or not the incident had been resolved and if workers' had received social support following an anger incident. Finally, the researcher aimed to tease out themes which were thought to be related to the experience of anger at work.

The overall results for the categories, sub-categories and themes identified for study one: the interviews are presented in figure 4. Each category, sub-category and theme was defined to encompass the data from the interviews. Tables 2 to 5 provide definitions of the subcategories for the causes, characteristics and consequences of short and long-term anger. In addition, excerpts provide examples of passages coded along with pseudonyms to protect the identity of participants. The textual data are summarised in the following section together with a discussion of each of the sub-categories and themes. (The results from this study resulted in a publication of a journal article. See appendix 6)

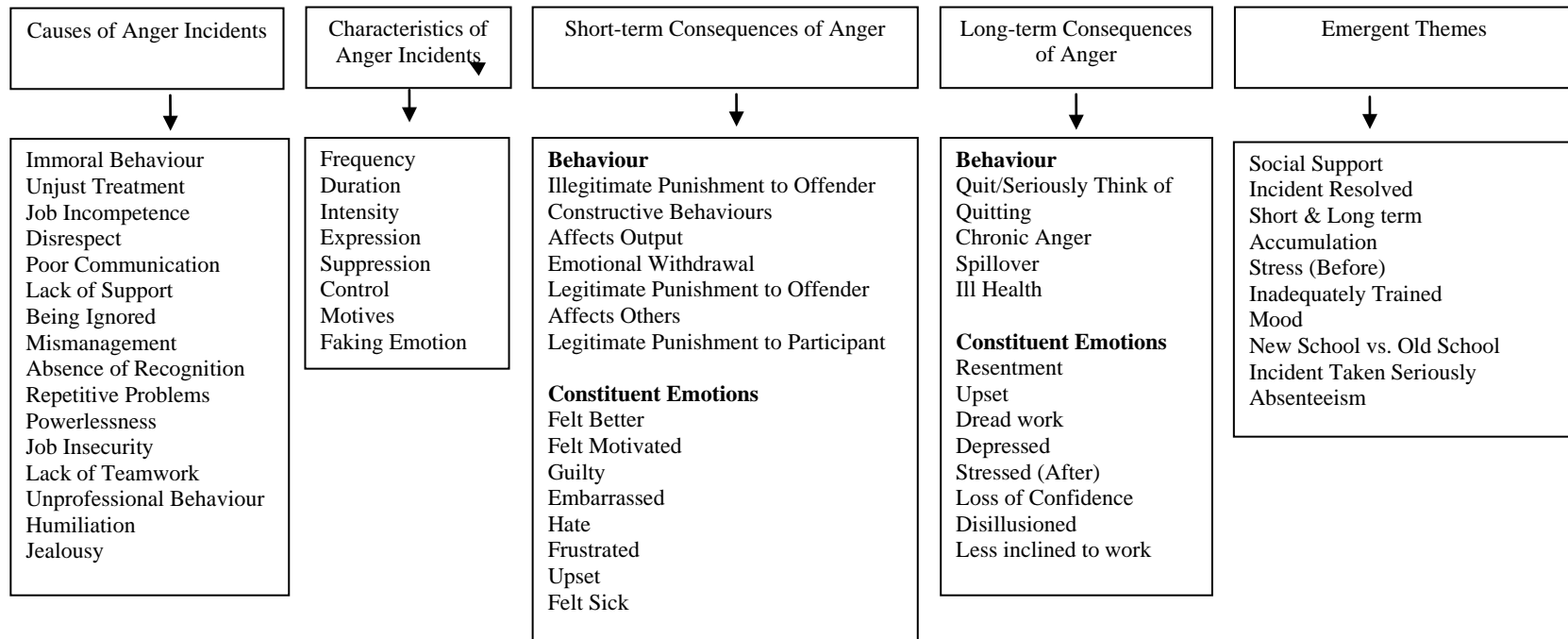


Figure 4: Categories, sub-categories and themes identified from the one to one interviews on people's experiences of anger.

## 4.2 CAUSES OF ANGER

Sixteen sub-categories in relation to causes of anger were identified under this category. These sub-categories were: immoral behaviour; unjust treatment; job incompetence; disrespect; poor communication; lack of support; being ignored; mismanagement; absence of recognition; repetitive problem; powerlessness; job insecurity; lack of teamwork; unprofessional behaviour, humiliation and jealousy (see table 2 below for a list of the sub-categories and their definitions).

Table 2: Sub-categories and definitions of causes of anger incidents

SUB-CATEGORIES	DEFINITION
Immoral behaviour	The offender behaved in a morally reprehensible way
Unjust treatment	Unjustly treated by another with the emphasis on injustice and unfairness
Job Incompetence	Others behaving incompetently at work
Disrespect	Being overruled by a colleague. Arrogance or rudeness not only by offender to respondent but to others
Poor communication	Not being given important information; excluded from meetings and lack of communication between depots and departments
Lack of support	Participants feeling isolated. Not getting the back up from managers and colleagues
Being ignored	Having a request ignored. A general feeling that offender is not listening to respondent or being blatantly ignored.
Mismanagement	Lack of good supervision; disorganisation; ignorance.
Absence of recognition	Lack of acknowledgement; no rewards
Repetitive problem	On-going problems; issues not dealt with.
Powerlessness	Having no power to deal with a situation
Job insecurity	Organisational change; fear of redundancy
Lack of teamwork	Others not working as part of a team
Unprofessional behaviour	Others not acting in professional manner
Humiliation	Direct and public humiliation
Jealousy	The offender is given a reward which you feel is undeserved

### 4.2.1 Immoral behaviour

The largest overall cause of anger was immoral behaviour. Immoral behaviour was the defined as situations in which the offender behaved in a morally reprehensible way or in an unethical manner.

Fourteen participants discussed others' immoral behaviour as a cause for their anger. For example, participants talked of how others' laziness, or general moaning and groaning riled them. In addition most participants felt that they had been taken advantage of in some way. For instance, Sylvia talked of how she would come in every week after her days off and everything was in chaos. She felt that she was being completely taken advantage of by the management, as she said they knew that she was the type of person that would just get on and sort the chaos out when she returned to work.

*Sylvia: half the work has not been done...and then you go to management and it might as well go over their heads...they know I'll put it right at the end of the day, even though I'll have a whinge and a moan it will be put right by me...week after week...because they know the way I am, I can't stand it.*

Others talked of how other colleagues exploited their position of authority. Susan spoke of how she felt that her supervisor was exploiting her position of authority by slacking off at work.

*Susan: It's all this not taking responsibility for her own role and the effect that because she doesn't toe the line i.e. turn up for work on time, deliver the service that it is meant to be delivered in, we have fallen out.*

Some participants mentioned how they became irate at other colleagues' immoral behaviour at work, which although did not affect them directly, it still annoyed them. For example, seeing staff "treat patients badly" or "not looking after patients properly" or witnessing staff stealing goods and getting away with it constantly.

#### **4.2.2 Unjust treatment**

This was defined as being unfairly treated by the offender. Example of such behaviours include being falsely accused of lying, stealing, poor performance, being unjustly criticised, having a reasonable request denied or being given unreasonable requests or being given an onerous workload. For example, Katie, felt angry about the constant demands others put on her.

*Katie: there's people just stood at my desk waiting for something and I think can't you see I'm busy, just give me five minutes. But they look at you as if to say, I want it doing just this minute...it riles me it really does.*

#### **4.2.3 Job incompetence**

Job incompetence was defined as an incident, which although unintentional, cost the participant time and the organisation money or goodwill. The issue of job incompetence was raised by ten of the participants. One participant spoke heatedly about such issues.

*Adam: we sort of have to pick up the pieces when other members of staff have not done their job right...I could go home a bit earlier instead of being here...when you know that these people who are causing you problems sort of walked out the door at half-past-three ...and you're still here at six o'clock trying to sort their mess out.*

#### **4.2.4 Disrespect**

Behaviours in this sub-category included the offender being arrogant to the participant or others, the offender being rude to the participant or others and the offender using foul language, being noisy or talking constantly. This sub-category also included being overruled, which tended to be by managers or a superior. Ann Marie spoke of how her head teacher had not backed her up in a meeting with a subordinate who had apparently stepped out of line. Participants spoke about how situations similar to this confused them and blurred the boundaries as to what their actual role was. Other participants spoke of how others' arrogance and rudeness irritated them and Susan spoke passionately about another co-worker's insolence.

*Susan: She persistently comes in late...she is not quiet about it she coughs from the moment she enters the ward...She is incredibly loud. When she comes into the office everything is disrupted, everything is disturbed. If you're holding a meeting she will talk above it, if you're on the telephone her voice is just so loud there is complete lack of respect for what is going on in the office at the time.*

Conversely, the rudeness of others did not need to be directed at the participant. A few of the participants mentioned how colleagues' arrogance and rudeness towards patients angered them. Peter spoke of how "*people with substance misuse were being treated differently*" from other patients and felt that they were prejudiced against and Jayne was really angered with "*the way staff treated the patients*" in such a disrespectful manner.

#### **4.2.5 Poor communication**

Communication problems emerged as an issue for some of participants, particularly the lack of good communication, being excluded from meetings and events, not being told what was happening at work and not being given the chance to discuss important issues. Although poor communication is not a category which has been distinctly found to be a cause of anger, it seemed apparent in this study that not being able to communicate or have good communication with others at work, led to frustration.

For instance, Mike mentioned that a lack of communication "*gets my back up*". He talked about how often three people may be often unknowingly trying to do the same job and wasting each other's time and that this really frustrated him. However, he also talked about his anger at not having had an assessment in the five years that he had worked for the company and that he would have liked his strong points and weak points recognised.

Jayne was outraged at the fact that management had put a job description together for a position she had developed and was fulfilling without even consulting her. She felt that she was originally part of a team but on finding out that she had been ostracised finally left her job.

There was also a general perception that there were "*too many chiefs and not enough Indians*" and that no one knows what the other person is doing. Jenny complains about how staff keep getting given new information but that "*it is all up in the air, nothing is written down*". Jenny blamed the management for not disseminating the information well enough and that staff are only receiving "*half a story*". Laura was annoyed about never receiving the right information from head office at the right time.

#### **4.2.6 Lack of support**

Lack of support, is defined as not receiving any support from colleagues. For instance, David described how he could not go to the head teacher for back up over a fall out with another teacher because the head teacher had “*made his feelings clear that he was going to back his older staff up and I was a ‘new kid on the block’*”.

#### **4.2.7 Being ignored**

Not being listened to, blatantly being ignored and having to ask for a job to be done several times, made seven of the participants angry. For example, Marlena told of how she was quite a calm person but not being listened to made her become really angry. She spoke of how she would often have to ask staff to carry out a task several times before they did it. Mike spoke of how management who were supposed to listen to staff and “*take on board*” what staff say often did not. Other examples include workers feeling that they were not listened to in meetings or being blatantly ignored by customers.

#### **4.2.8 Mismanagement**

A number of the participants spoke of how staff were not supervised properly and that this had an effect on the participants’ own ability to get their own job done. Participants also complained that management worked in a disorganised fashion and they perceived that there was no logic to the way the management worked. Other participants fumed over the fact that managers apparently did not know anything about what the actual participant did at work. Maureen spoke of how over the last twenty-eight years, the one thing that particularly angered her was, “*all the managers, who don’t have no idea of your job, who try to sort of like tell you, ‘this is the way its done’ and they’ve never actually done it themselves*”.

#### **4.2.9 Absence of recognition**

This category included participants not being rewarded for hard work. Peter said “*If I had been working in a trust that had good management, good clinical support and recognised the stresses of doing the job*” then he may not have resigned from his previous job. Joe spoke of how “*there is no recognition from the “top-brass” and that*

he “*wouldn’t mind if they (management) came up to me and said, listen, I know you’re five men down, but try and do your best*”.

In addition, Jayne said how there is a pressure to gain extra qualifications in nursing and that when you do it is really “*angering and frustrating*” when you cannot use them and that she did not get her PhD so that she could “*skivvy around on a ward*”.

#### **4.2.10 Repetitive problem**

Participants spoke of how they had to put up with a repetitive problem at work either on a daily or weekly basis and although they tried to sort it out it was never dealt with. Sylvia for instance had worked in an organisation for fifteen years and had five superiors who had all promised to sort out a problem at work and none of them had ever dealt with it. Steven was vexed about an ongoing problem with software while Adam was frustrated at the fact that nothing was being done to alleviate the continual problems that he had with a student with special needs.

#### **4.2.11 Powerlessness**

Participants in this category felt that they had no control or influence over a situation. Jayne talked of how she felt so “*powerless*” with the care she had over her patients due to the fact that patients have to be dealt with quickly and that such a system (N.H.S.) “*limits your ability to provide satisfying care to people*”. Similarly, Peter spoke of how his frustration was not so much with clients but with the frustration “*about not being able to do anything*” because of “*time pressures and training needs*”. He continued to talk of how “*you don’t feel trained in a particular intervention properly... you might have been on a 2 day course but it doesn’t equip you*”.

#### **4.2.12 Job insecurity**

Job insecurity and organisational change affected how people felt at work. This sub-category included participants becoming angry because they were angry about the fear of redundancy or felt insecure about the future of their job.

Jenny spoke of how she and her colleagues were angry about “*the changes*” at work and being “*unsure of the future*”. In such cases, it seemed that it was the manner in which



information was disseminated about such changes that made people angry. Jenny was angry about “*how the information was passed on*” and that this was “*done very poorly*”.

#### **4.2.13 Lack of team work**

Other colleagues not trying to reach compromises with others and not working together as a team infuriated a few of the participants. For example, Ann Marie told of how a colleague “*didn’t have confrontations with them (other colleagues) but she wouldn’t plan with them or do anything as a team*”.

#### **4.2.14 Unprofessional behaviour**

A few of the participants talked about how others at work, acting in an unprofessional manner, to the participant or others at work really annoyed them. Susan, for instance, told of how a colleague’s actions “*drive them all mad*” as “*they are a professional service and they want to be seen as professional*”.

#### **4.2.15 Humiliation**

Incidents where participants had been humiliated or disparaged made participants angry. Participants became particularly angry when critical or belittling comments were made to the participants in front of others. For example, Barry spoke of how he felt belittled at the way another colleague spoke to him. Katie told of how she felt “small” when her newly appointed boss spoke to her abruptly in front of another manager and said the “power” had probably “*gone to her head*”.

#### **4.2.16 Jealousy**

Jealousy occurred when the offender was granted an award that the participant felt they deserved as well, or instead. Katie spoke in detail about how a coworker had been promoted to a managerial position, which she had hoped to attain as well, and that this made her “*really angry*” as she said she knew that she was more than capable of doing the job.

### 4.3 CHARACTERISTICS OF ANGER INCIDENTS

The second specific aim of this study was to investigate the nature and characteristics of the anger incidents. This included investigating the frequency, duration and intensity of anger incidents and finding out how people react to anger incidents. In total, 8 sub-categories were identified: frequency; duration; intensity; expression; suppression; control; motives and emotional labour (See table 3).

Table 3: Sub-category and definitions for characteristics of anger

SUB-CATEGORY	DEFINITION
Frequency	The amount of times participant became angry at work.
Duration	The length of time the anger lasted.
Intensity	The strength of the participants' angry feelings.
Expression	If the participant confronted the offender of the angry incident in any way i.e. verbally or physically
Suppression	If the participant concealed their feelings of anger from the offender
Control	Whether or not the participant perceived that they had controlled their feelings of anger in any way
Motives	Reasons why the participant chose to become angry and express or suppress their anger
Emotional Labour	The act of faking emotion. For example, participants would fake happiness instead of anger so that their true feelings could be masked.

#### 4.3.1 Frequency, duration and intensity of anger incidents

Frequency of anger incidents, the intensity of anger incidents and the duration of anger incidents were examined. Becoming angry at work was quite a common occurrence. Participants spoke of how they felt angry “*every Monday morning*” or “*two to three times a week*”. Several participants spoke of how they felt angry on a daily basis. Hayley said she felt angry several times a day, every day.

The duration and intensity of the anger differed considerably amongst participants. Some spoke of how the anger “*comes and goes*” others spoke of how they experienced strong feelings of anger for the offender that was long lasting.

#### 4.3.2 Expression

Fourteen participants expressed their anger during an anger incident. However, this was displayed in one of several ways. Firstly, participants verbally expressed their anger to

the offender in an abusive manner. An abusive manner involved the participant approaching the offender in an aggressive way. The participant was likely to shout at the offender using insults or offensive language. Secondly, the participant verbally expressed their anger in a non-abusive manner which involved participants confronting the offender directly so that they could explain what the offender had done to make them angry. The participant tended to approach the offender calmly and spoke firmly but politely to the offender. Thirdly, body language would be used in order to show the offender that they had made the participant angry, such as, “*storming out*” of the office. Finally, the participant used physical aggression either towards the offender directly or towards inanimate objects.

### **4.3.3 Suppression**

Eleven of the participants suppressed their anger during an incident. Participants in this category “*bit their tongue*”, “*walked away*” from the offender or just “*stayed quiet*”.

Alternatively, participants frequently mentioned that they “*don’t really show anger at work*” or as Katie said “*you dare not express anger – you suppress it because you feel at work that is the thing to be done*”.

Other participants mentioned how they did not show their anger because of the offender’s position in relation to them. Paul talked of how he was “*really, really angry at the head, without showing it obviously, because she was the head teacher*”.

Participants also mentioned what they actually felt at the time of an incident too. Cath felt that she was “*ready to boil*” and she felt ready to “*flip and explode*”. Katie spoke of how she tries to “*control it at work but it makes me ill... you can feel yourself fizzing inside; it makes me feel sick*”. Helen told how the anger overpowered her and how it “*keeps haunting me*” and how she can suddenly get overwhelmed by such anger and that it is “*almost debilitating*” and she doesn’t know “*how to express that anger*”.

### **4.3.4 Control**

Only four of the participants believed that they controlled their anger, that is, expressing anger at a lower level than what it is being felt. For instance, Kevin said he was “*quite controlled*” and Robert said that when you work with children you “*have to control it*”.

The small number of incidents in which participants said they controlled their anger possibly reflects the reason why a modest amount of research on control of anger has been carried out. Research on anger has tended to examine the expression and suppression of anger which has shown to have many possible negative effects for both the individual and the organisation.

#### **4.3.5 Motives for the expression and suppression of anger**

Motives for expressing anger involved participants feeling that they could not contain their anger anymore while others just wanted to let the offender know what they had done, probably so that the behaviour would not be repeated again. Barry admitted that he became angry and physically aggressive with a colleague as *“I was trying to assert a certain sort of stance in the department that I am top dog”*.

Conversely, participants who suppressed their anger felt that expression of anger was not right at work, especially if it was towards a superior or if the participant felt that they did not know how to express their anger appropriately.

#### **4.3.6 Emotional labour**

The findings suggest that nearly half of the participants were suppressing anger and displaying positive emotions to the offender. In addition, some participants spoke of how they also faked emotion towards someone who was not the offender. This tended to be with a customer or student after an anger incident with the offender. This suggests that faking of emotion is not only being carried out with the offender but also with people around the angry person who did not have anything to do with incident. This may result in angry people having to double their efforts in trying to concentrate on not only hiding their emotion from the offender but also others around them. Hence, angry people may find themselves suffering from the negative effects of emotional labour sooner than if they were just faking emotion with the offender.

An example of faking emotion to others is given by David, a head of department, who was angry for reasons, which although did not concern his colleagues, led him to have to fake his emotions to them anyway:

David: “*I was trying to be polite to them (colleagues) and say hello in the mornings...it was a mask really because I used to go into work and I’d smile at these individuals and I didn’t really want to...but I had to because I was head of department*”.

However, a few of the participants said they would find it too difficult to hide their feelings of anger, while one participant said he faked anger in order to get a reaction from his students.

#### 4.4 CONSEQUENCES OF ANGER: SHORT-TERM

Behaviours occurring immediately after the anger incident were coded into seven categories: illegitimate punishment to offender; constructive behaviours; affects output; emotional withdrawal; legitimate punishment to offender; affects others and legitimate punishment to participant. Constituent emotions were also identified as short-term consequences of anger events. This included the feelings which participants reported experiencing immediately after the event: felt better or motivated; guilt or embarrassed; hate; frustration; upset or sick (see table 4).

Table 4: Sub-categories and definitions for short-term consequences of anger

SUB-CATEGORY	DEFINITION
Illegitimate Punishment to Offender	Revenge, assigning undesirable jobs to offender, spreading gossip or lies, sabotage, going slow, work withdrawal and ‘going behind someone’s back’.
Constructive Behaviours	Accepting an apology; actively negotiating a resolution.
Affects Output	Incident affects participants’ work
Emotional Withdrawal	Ignoring the offender; giving the ‘silent treatment’; ‘cold shouldering’ the offender.
Legitimate Punishment to Offender	Appealing to higher authorities; having offender dismissed or demoted;
Affects Others	Incident affected others at work; created bad atmosphere
Legitimate Punishment to Participant	Participant punished because of incident; suspended; dismissed or demoted.
Constituent Emotions –Short-term	Participant felt better for expressing anger or felt motivated; felt guilty; felt hate towards the offender; frustrated about the entire incident; felt upset or sick over incident and embarrassed about behaviour.

#### **4.4.1 Illegitimate punishment to offender**

Illegitimate punishment was defined as behaviour which is carried out by the angry person in order to take revenge on the offender. However, this tends to be carried out in surreptitious ways so that the offender has no knowledge that the angry person is carrying out the punishment on them. For instance, ten of the participants admitted to thinking strongly about getting back at the offender or actually taking out revenge against the offender. Jayne confessed that she felt “*no compunction about going behind somebody’s back*” if they had been unreasonable.

A few of the participants gossiped about the offender or talked about them behind their backs while others deliberately put the offender’s work “*to the bottom of the pile*” or went on a “*go slow*”. Jenny said that she and her colleagues would not put in extra overtime when needed to get back at the organisation while Andrea said that she and her colleagues would “*boycott*” any educational talks or journal clubs in order to get back at management.

#### **4.4.2 Constructive behaviours**

Constructive behaviours were defined as behaviours which involved the angry person accepting an apology or trying to actively negotiate a resolution. Only six of the participants said that they apologised or accepted an apology from the offender and actively tried to negotiate a resolution. Kevin said that initially he is quite passive then when he feels comfortable he goes back to the offender and discusses the incident in a calm manner. Robert said he prefers to “*build bridges rather than hold a grudge*” especially when dealing with students. He felt strongly about trying to resolve situations and not letting them carry on; both with colleagues and students. Laura said how she “*can’t be doing with grudges; it takes up too much energy*”.

#### **4.4.3 Affects outputs**

Affects output was defined as the angry person perceiving that their work output had significantly suffered, as a direct result of the anger incident. Several of the participants felt that becoming angry affected their work.

Mike: *it spoils your work output...your work deteriorates because you are not concentrating on the work you are doing. You are concentrating on the anger that's built up...and what they've said to you.*

Susan spoke intensely about how a colleague used to make her so angry that she was completely distracted at work.

Susan: *It's off-putting...your head is completely bombarded...and I go and do my visits and I have not even brought my notes with me...she distracts you to such a point that you forget what it is you need to collect.*

#### **4.4.4 Emotional withdrawal**

Emotional withdrawal is defined as the participant choosing to deliberately ignore the offender; giving them the 'silent treatment' or 'cold shouldering' the offender. Also in this study with emotional withdrawal participants chose to avoid the offender. This involved either staying out of the offenders' way for a few days and deliberately steering clear of them or just being particularly quiet at work when normally the participants would be quite "chatty".

#### **4.4.5 Legitimate punishment to offender**

Legitimate punishment to offender was defined as the angry person appealing to higher authorities or arranging to have the offender dismissed or demoted. In line with findings from Fitness' (2000) study, this study found that four of the participants felt the need to take official action against the offender of the anger incident. Susan, for instance, appealed to management for a transfer of office as the situation between her and a colleague was becoming "unworkable". Helen was so "furious" about the way she had been treated at work that she went to her union and Human Resources division. Alternatively, Laura who felt that suspension was not sufficient for one colleague wrote to Head Office and requested that the offender be moved to another department.

#### **4.4.6 Affects others**

Affects others, is defined as anger incidents in which the angry person's expression of anger has a negative effect on other people who witness the anger. A small number of

participants spoke of how anger incidents affected others at work. For example, Barry spoke about the atmosphere at work ensuing after an incident with a colleague and that “*over the days it’d become increasingly difficult for people...to work with each other*”. Susan spoke of how her relationship with another colleague and how her incessant feelings of anger affected the whole team “*100%*”.

#### **4.4.7 Legitimate punishment to self**

Legitimate punishment to self is defined as punishment to the angry person because of their reaction to anger. Punishment involved the angry person being suspended, dismissed or demoted. One participant was suspended on two separate occasions due to his reaction towards an offender. One involved a “*bit of a scuffle*” after a co-worker had made, what the participant thought to be, an unreasonable comment to him. In the second instance, he was suspended for what he believed to be a “*little outburst*” towards a manager.

### **4.5 CONSTITUENT EMOTIONS: SHORT-TERM**

Constituent emotions in the short-term were feelings which the angry person felt subsequent to the anger incident occurring regardless of whether the participant expressed, suppressed or controlled their anger.

#### **4.5.1 Felt better or felt motivated**

Quite a few of the participants felt better after expressing their anger towards an offender. Barry told of how after a confrontation with a colleague, and expressing his anger, he felt better because he had “*come out champion*”. Hayley mentioned that swearing made her feel better after being wound up by customers on the phone and Laura said that she worked better when she is angry as it actually motivates her.

#### **4.5.2 Guilt and embarrassment**

However, other participants mentioned that they felt guilty about their behaviour over an anger event. Mike said losing his temper “*makes him feel worse*” and Susan admitted after giving a long passionate account of how a colleague “*drove her mad*” that



she does “*feel bad because she is a nice person really*”. Furthermore, Ann Marie “*felt ashamed*” about her reaction towards an offender.

### 4.5.3 Hate, frustrated, upset and sick

Strong emotions, especially hate for the offender, were consistent responses to anger incidents. Paul spoke of his growing hatred for a pupil, “*I hate him, I hate him*” he would shout as soon as he came home. Participants also mentioned that they became frustrated with people at work and situations that were never resolved. In a couple of incidences participants mentioned that they became very upset or embarrassed over an incident. Maureen “*burst into tears*” over an incident and ” and as already mentioned Katie spoke of how she tries to control her anger at work “*but it makes me ill... you can feel yourself fizzing inside; it makes me feel sick*”.

## 4.6 CONSEQUENCES OF ANGER: LONG-TERM

Behaviours occurring long after the anger incident, but still related to the incident, were coded into five categories: quitting/seriously thinking of quitting; chronic anger; spillover, ill health and constituent emotions. In addition, constituent emotions that participants felt were also coded into seven sub-categories: upset; resentment; dreaded going to work; depressed; stressed; loss of confidence and disillusioned and were split up into feelings for self, the offender and work (see table 5).

Table 5: Sub-categories and definitions for long-term consequences of anger

SUB-CATEGORY	DEFINITIONS
Quit/Seriously think of quitting	Quitting or thinking about quitting a job over an incident or on-going anger
Chronic Anger	Feeling constantly angry
Spillover	Affects of anger incidents spilling over into workers’ personal lives
Ill Health	Participant suffered mentally and physically from incident/s
Constituent Emotions – Long-term	Participant felt resentment or held a grudge against offender; still upset about an incident; ended up dreaded going to work; became stressed or depressed; lost confidence and became disillusioned and less inclined to work

#### **4.6.1 Quit/seriously think of quitting**

Quitting or seriously thinking about quitting was defined as angry persons wanting to leave their workplace as a result of an anger incident occurring or because of an anger incident which had not been resolved. Quitting, or seriously thinking of quitting, from a job was seen to be the only option available for some participants. Six of the participants had actually left an organisation over an anger incident or one that had not been resolved. For example, participants said they were angry about being continually excluded from making important decisions, never getting support from management or not getting along with older members of staff.

Debbie, who was a newly qualified nurse, said that the older staff did not like the *“change factor”* and the new practices brought in by new staff. She said she *“couldn’t bear going to work every day to work with them...that’s the reason I left the job”*.

Other participants spoke of how they often thought about quitting their job. Again, this was mainly due to the perception that circumstances at work were not going to change and participants would have to put up with feeling frustrated and angry on a daily basis.

Susan was upset when she spoke about a colleague with whom she did not get along with and said *“when someone keeps pecking away at you there is only so long you can put up with it for”* and she often wondered *“which would go first my sanity or the service (i.e. the health service)”*.

#### **4.6.2 Chronic anger**

Chronic anger is defined as angry people who feel frequently or constantly angry at work. This included feeling angry *“constantly”*. Peter said that he felt angry every day for quite a few years and Steven spoke of how he experienced *“rip-roaring anger ...on a regular basis”*.

#### **4.6.3 Spillover**

Spillover was the effect of the anger incident spilling over into the angry person’s homelife. Taking anger home was not uncommon for some participants. Liz said she

did not show her anger at work as she kept everything bottled in but *“then I get home and I’m like a lunatic”*. Katie said she *“starts screaming, particularly at the kids”*.

Anger at work also affected workers’ relationships with their partners. Hayley’s partner moans at her for getting so angry and Jenny says she can be *“touchier”* with her partner. David was so affected by incidents at work that he was unable to speak to his wife or children; he slept constantly, gave up training, lost weight and felt sad all the time. As soon as Paul came home he would start ranting on about the student that made his life a misery. *“The first thing I’d say when I came home was ‘guess what he’s done now’...it does affect you when you go home and you’re not even with him”*.

#### **4.6.4 Ill health**

Ill health was defined as the angry person suffering mentally and physically due to experiencing anger at work. For one particular participant, suffering constant anger meant that both her mental and physical health suffered. Helen was *“furious”* with her supervisor’s bad management. She consequently had to see a counsellor and doctor because of it.

### **4.7 CONSTITUENT EMOTIONS: LONG-TERM**

Constituent emotions in the long-term were considered as emotions which continued to be felt by the angry person long after the anger incident had first occurred. These emotions included the participant feeling on-going resentment for the offender, feeling constantly upset, dreading going to work, feeling depressed and stressed, a loss of confidence, feeling disillusioned and less inclined to work.

#### **4.7.1 Resentment**

Other emotions included the participant harbouring feelings of resentment for an offender or holding a grudge against an offender long after an incident. David said *“I resent...those two people...because they made me resign”*.

#### **4.7.2 Upset**

Leaving emotions of anger to simmer resulted in some of the participants breaking down in tears and crying at work. This was often followed by feelings of embarrassment too.

#### **4.7.3 Dreaded work**

Finding it difficult to go into work was not unusual for a number of the participants. This was generally because participants did not want to face a person or situation and know that it would result in feelings of anger again.

#### **4.7.4 Depressed**

Feelings of anger, for a small number of the participants, eventually turned into feelings of depression, and one participant had to leave the organisation because they had become so depressed.

#### **4.8.5 Stress: subsequent to anger**

Feelings of anger often led to feelings of stress which in turn led to time off work for some of the participants. Katie repeatedly felt angry at work which she believed led to her feeling stressed and constantly tense and uptight. Consequently, Katie had to see a physiotherapist regularly in order to try and alleviate her symptoms. Additionally, David became so stressed after becoming constantly angered by colleagues that all he could do when he went home was sleep and he said it really “*messed up*” his home life. These results are in line with other studies that have shown that anger is a key ingredient of work-related stress (Long, 1988; Mykeltun, 1985 as cited in Pekrun and Frese, 1992) and can often lead to burnout and lowered well-being.

#### **4.7.6 Loss of confidence**

A couple of the participants mentioned how they had lost their confidence subsequent to an event. David spoke of how he “*was a risk taker; I wouldn’t say that now*”. For Debbie management was the next step up, yet she decided against it as she did not feel she could tackle the hassle she was getting from the older staff.

#### **4.7.7 Disillusioned and less inclined to work**

Jayne spoke avidly about how people in the health service want to make a difference yet the way the system is set up makes this impossible to do. She said she knew of several people who had left the health service because people are becoming very frustrated, angry and “*disillusioned*”, as she had, and that the people that stay on “*just do what they’ve got to do and they take the pay packet home and that is the end of it...and that is really sad*”.

### **4.8 EMERGENT THEMES**

Other patterns in the data which emerged through analyses were incident resolved and social support. Even though previous research had already implied that they could have an effect on anger incidents, more information was needed to find out what effect they had on the unfolding process of anger. So as part of investigating the consequences of anger incidents, looking at participants’ perceptions as to whether the incident had been resolved or not, and if they had received some sort of social support, did seem to have an effect on the behaviour and constituent emotions of participants. Therefore, these two variables could be seen as mediating or intervening variables on the outcome of the incident.

#### **4.8.1 Social support**

In this particular case, nine of the participants felt that being able to talk about an anger incident with another colleague and gain emotional support had helped the situation. Barry said how talking to another colleague had “*relieved the pressure*”. Sylvia said that it enables her to “*let off steam*”. Thus, social support was seen as a variable which influenced the behaviour and feelings of participants at the short-term level.

#### **4.8.2 Incident resolved: Short-term**

Only four of the participants considered an anger incident to have been successfully resolved and believed that the relationship between themselves and the offender was “*back to normal*”. Ann Marie said, “*We’ve just picked up where we’ve left off and it’s no problem*”.

### **4.8.3 Incident resolved: Long-term**

Six of the participants mentioned that they perceived an incident as unresolved long after it had happened. Barry still felt uncomfortable with his manager two years after a confrontation and said that he would have felt better if he had sat down with his manager after the incident and talked it over thoroughly.

Ann Marie admitted that she simply could not forget about a certain incident with a colleague and that this made the situation difficult at work. While Susan said that although her on-going angry feelings towards a fellow co-worker had “*simmered down*” she still felt uneasy around her and the situation between them was far from ever being resolved. The subsequent relationship was also seen as “*very, very, very bad*” by one participant and “*hostile*” by another following an anger incident.

However, only one of the participants in study one: the interviews, perceived their relationship to have returned to normal following an anger incident. The situation was perceived to have been rectified, after the participant had been suspended for his aggressive behaviour towards the offender.

### ***Other emergent themes***

Other themes also emerged from the data and were identified as factors that could possibly influence the anger experience. These included: accumulation; stress; inadequate training; mood; new school versus old school; incident taken seriously and absenteeism. These themes are viewed as themes which influence the likelihood of an anger incident occurring in the first place. Hence, they were identified as influences of the anger incident, and would be comparable to what AET would call work environment features.

### **4.8.4 Accumulation**

Letting the anger manifest or build up, seemed to increase the likelihood that an individual would eventually express their anger. Participants spoke frequently about how they became increasingly angry over the course of a day or week and that it would be a minor issue which would end up being the “*straw that broke the camel’s back*”.

#### **4.8.5 Stress: Prior to anger**

Stress was not only experienced subsequent to anger but it also precipitated it. Participants believed that being stressed at work facilitated the occurrence of anger.

#### **4.8.6 Inadequately Trained**

A number of participants felt that their inexperience with dealing with “*difficult*” adults hindered their ability to resolve a situation. Debbie felt that some basic training in how to deal with anger would have helped her. David said he was “*trained to teach but not to manage*”, and that training in management issues would have been an advantage. Paul said that he did not know how to deal with difficult students at school and he this would lead to him becoming frustrated and angry quite often. Andrea said “*that there are more efforts to train staff to deal with anger from patients and relatives, but because of that, because that’s the primary concern there’s no real thought about anger within the organisation between staff*”.

On the other hand, Hayley said that she had been trained to deal with difficult customers and that helped her. She said that “*they (the customers) don’t get you down and you forget about it as soon as it (an angry incident) has happened*”.

#### **4.8.7 Mood**

Frame of mind, how participants were feeling on a particular day and the type of day or week the participant was experiencing all seem to contribute to whether the participant became angry or not.

#### **4.8.8 New school versus old School**

An unexpected finding was that anger incidents were more likely to happen between new and old staff. Susan spoke of how her colleague in health was “*of that ilk*” and that the more newly qualified workers are of the attitude that this older member of staff was “*making people’s lives a misery and we (more qualified workers) are paying you to do it*”. Debbie complained about how the older employees in the “*little general district hospitals are not prepared to change and resented learning new skills*” and the new staff are further suppressing their anger as they are afraid to “*rock the boat*”. David

mentioned how in education there was a similar problem and that problems arose from different teaching practices between the newer and older staff.

#### **4.8.9 Incident taken seriously**

Participants told of how their managers had an influence over anger incidents. This would seem especially so in education. Ann Marie told of how “*the head absolutely colours the whole thing*”. Ann Marie added that managers often thought that such incidents between colleagues were “*just personality clashes*” and this view was also held by Susan who said how her manager thought her and a colleague “*just don’t get on*”. The situation is therefore minimised and nobody is facilitating staff in difficult situations with their colleagues. This theme was therefore seen as a variable which influenced the subsequent long-term feelings that participants held.

#### **4.8.10 Absenteeism**

Absenteeism refers to the participant taking time off work as a result of an anger incident. It appeared that in some of the interviews that anger had led to a certain amount of time off work for some participants.

#### **4.8.11 Revision to conceptual framework**

Source, context, employment sector and gender were originally in the ‘influences of anger incidents’ box in the conceptual framework. However, they were moved out of the box and put in their own separate boxes, prior to ‘influences of anger incidents’ box. Thus, revisions to the conceptual framework involve source, context, employment and gender now acting as moderators to the entire anger incident. If these moderators were placed in ‘influences of anger incidents’ box, associations between these moderators and those in the ‘influences of anger box’ may be mistakenly overlooked.



## **4.9 DISCUSSION**

### **4.9.1 A discussion of the findings for the interviews on workplace anger**

The aim of this current study was to carry out one-to-one, in-depth interviews with participants about their experiences of anger at work in order to give support to the formation of a theoretical model of workplace anger. This, in turn, will enable the development of items for an event contingent diary on anger incidents so that certain aspects of the model can be tested in study two: the anger diaries.

#### *Causes of anger incidents*

With respect to the causes of anger incidents, the findings are consistent with previous research (Fitness, 2000); specifically, that others' immoral behaviour, being unjustly treated, others' job incompetence, disrespectful treatment, lack of support and being humiliated cause people to become angry at work. The most common cause of anger in this study, other's immoral behaviour, was found to be the second most common cause of anger in Fitness' (2000) study describing workers' anger experiences.

This sub-category was made up of incidences, in which, the offender did not take responsibility for a mistake, the offender stole, misbehaved, lied or took advantage of the angry person or others. Fitness (2000) also found under the sub-category of immoral behaviour, that the offender lying or taking advantage of the angry person or others, made participants angry.

In line with more general studies of anger-eliciting events (Allcorn, 1994; Fitness 2002), over half of all participants felt that they had been unjustly treated in some way. Furthermore, the finding that other's job incompetence creates anger is consistent with previous studies which suggest that events that hamper the participants' ability to get the job done, unintentional mistakes (Fitness, 2000) and someone interfering with a worker's work related goal (Allcorn, 1994) creates anger.

In addition, participants in this current study often felt that they had been treated in a disrespectful manner and this is consistent with much of the research on causes of

anger, which has found that other's arrogance or disrespectfulness (Averill, 1982; Fitness, 2000) and other's incivility (Grandey et al. 2002) instigate anger.

The finding that a lack of support from colleagues is consistent with previous findings which state that anger is associated with perceived organisational support, such as levels of supervisory support (Neill et al. 2009). Indeed, in this present study, lack of support tended to be referred mostly to the lack of support provided by management, and it incensed a third of participants in the current study.

With regards to powerlessness, studies on women's anger have also found that feelings of powerlessness have been linked to the expression and suppression of anger (Thomas et al. 1998). As for job insecurity as a cause of anger, Johnson and Indvik (2000) suggest that job insecurity is one of the main reasons people are becoming angry at work as they are fearful and unsure as to the outcome of their future.

In addition, incidents where participants had been humiliated is consistent with previous research (Allcorn, 1994; Fitness, 2000), which has found that people become angry about being criticised or belittled, especially when this is done in front of others.

The results suggest that there are many more reasons why participants become angry at work, such as, poor communication, being ignored, mismanagement, and absence of recognition, a repetitive problem, lack of teamwork, unprofessional behaviour and jealousy. Although these new findings could have been interpreted differently by another researcher, and possibly placed into different sub-categories, it was felt that these were the most logical and rationale sub-categories to place them in, in the present study.

### ***Characteristics of anger incidents***

Anger incidents were also reported as being experienced quite frequently. This is in keeping with previous research which has suggested that half of all workers felt angry at work (Gibson & Barsade, 1999). This suggests that anger is not only an episodic event but as Gibson and Barsade (1999) found in a quarter of workers, anger may be chronically experienced too. Also, anger was experienced intensely which is consistent

with findings from Grandey et al. (2002) who found that nearly half of all the participants in their study experienced intense anger when they became angry.

However, it is difficult to assess at this stage the true extent of participants' anger, particularly in relation to frequency, duration and intensity of anger incidents. Memory biases (Fisher, 2002; Fisher, 2005) may have an effect on the recall of incidents, whereby the experiences of anger are overestimated (Fisher, 2002; Fisher, 2005), underestimated (Kubey et al. 1996), or whereby only the most recent or intense events (Radelmeier & Kahneman, 1996 as cited in Bolger et al. 2003) are recalled. As already mentioned, one of the main aims of this study is to investigate anger in real time, to try and reduce the memory biases which exist when using one-time self-report measures of anger and interviews, as in the current study. However, the results so far do suggest that as with previous studies, anger is experienced frequently (Averill, 1982) and that when it is experienced it can be intense and it can be long lasting (Gibson & Barsade, 1999).

The finding that people express anger in several different ways is consistent with previous research on anger expression which suggests that anger can be expressed in a multitude of ways (Averill, 1982; Dahlen & Deffenbacher 2001; Deffenbacher et al. 1996; Fitness, 2000). The four types of expression identified in this study were verbal abusive, verbal non abusive, body language and physical aggression. Deffenbacher et al. (1996) identified seven types of anger expression; four were aggressive and involved the angry person expressing anger in verbal or physical forms, and are similar to the two aggressive forms of anger expression in this study, verbal abusive and physical aggression. Furthermore, the verbal non-abusive forms of anger found in this present study are consistent with findings from previous research too (Deffenbacher et al. 1996), which has shown that the angry person could react in a non-aggressive way, by either confronting the offender to rectify the situation, or by just leaving the offender alone. This later finding, leaving the offender alone, is more in accordance with the suppression and suppressive behaviours discussed in the next section.

Hence, these findings are similar to those found in previous research which involves the angry person confronting the offender (Fitness, 2000) in a functional way; thus, anger in such circumstances is serving as a positive social function, or is expressed to regulate interpersonal relationships. Alternatively, when anger is expressed intensely, in a dysfunctional way, it can include expression in many different forms.

Suppression of anger in this present study involved covert coping, such as the angry person just getting on with their work or choosing to walk away from the offender. Such covert coping strategies have been found in previous research in response to the anger instigating event of unfair treatment at work, and have unfortunately been associated with cardiac arrest and death (Leineweber et al, 2009).

Furthermore, the angry persons use of the body, for instance their muscles being tense from suppressing anger, are also similar to those provided in previous research (Thomas et al. 1998) in which participants describe anger as being hidden in the body. Unfortunately, as Leineweber et al (2009) describes, anger that 'boils under the surface' is the main mechanism by which individuals eventually fall ill due to the physical reactions which occur in response to suppressing anger over time. In addition, other participants mentioned how they did not show their anger because of the offender's position in relation to them. This is consistent with Fitness' (2000) which found that power had an effect on whether or not people expressed or suppressed anger at work.

In connection with the motives for expressing anger, some participants just could not contain their anger anymore, while some wanted to let the offender know what they had done. This is consistent with the motives for expressing anger in previous research (Averill, 1982) whereby participants expressed anger just to let off steam or because the angry person wanted to change conditions that lead to the anger incident, rather than inflicting harm or pain on the offender.

However, this research also highlighted the fact that managers became angry at subordinates because they wanted to intimidate the offender and assert their authority. This is consistent with previous research on anger at work, which proposes that superiors are more likely to confront subordinates as they are less likely to fear any negative consequences, and subordinates are less likely to confront their superiors as they feel they hold less power in the situation (Fitness, 2000) and fear retribution if they did express anger.

In addition, to expressing authentic feelings of anger, participants in this study also suppressed their anger and tried to express another emotion which they did not feel; thus, performing emotional labour. As Mann (1999) has pointed out, it is harder to

suppress negative emotions such as anger than it is to fake them, and as a result angry people may find their mental and physical health will suffer as a result, particularly in the long-term.

### *Consequences of anger –short-term*

Turning to the short-term consequences of anger incidents, participants spoke of engaging in illegitimate punishment. Such findings are consistent with previous research (Fitness, 2000) which has found that illegitimate punishment such as arranging for offenders to be assigned undesirable jobs, sabotage, spreading gossip, hiding documents or 'going slow' were common behaviours carried out by angry persons at work.

In addition, participants talked about using constructive behaviours following an anger incident. Research has previously found that constructive behaviours (Fitness, 2000) are not behaviours which are often carried out by angry people at work, and when they are, they tend to be carried out by higher power workers, and very few are carried out by lower power workers.

Participants also spoke of how the anger affected their output. This is consistent with previous research, which has also suggested that people, who experience anger, and suppress anger, found that it deprived them of strength (Thomas et al. 1998). Furthermore, research on emotional labour (Grandey, 2000) has found that emotional dissonance may require the person to draw on additional resources which limit what is available for carrying out their work.

That angry people tend to emotionally withdraw from the offender following an angry incident, is in line with previous research (Fitness, 2000) which has shown that angry people emotionally withdraw from the offender by 'staying cold' or give the offender the 'silent treatment'.

In addition, to illegitimate punishment to the offender above, angry persons sometimes carried out legitimate punishment on the offender. Fitness, (2000) also found that angry people sometimes take the legitimate route to getting back at the offender by reporting the offender to management. Although not specifically investigated in previous

research, legitimate punishment to the angry person may provide clues as to how management deal with anger incidents. Although sometimes trained to deal with customers, clients and patients, employees may not know how to deal appropriately with angry persons with internal interactions. Dealing with staff in the correct way is crucial as employees need to know the boundaries in which they operate and this tends to be governed by display rules and norms. As already mentioned these display rules and norms are sometimes blurred or non existent for interactions between coworkers. Hence when interactions do occur between coworkers, and employees are punished because of it, they may react to that punishment as the rules and regulations of anger expression may not have been clarified previously.

The anger incident affecting others at work who did not have anything to do with the anger incident provides support for previous research which suggests that anger can influence the emotions, thoughts and behaviours of other people because of emotional contagion (Miron-Spektor & Rafaeli, 2009). Furthermore, it is consistent with research on negative behaviour which has also found that behaviour by one person in an organisation can impact on teams and groups. Such people have been described as ‘bad apples’ and they act like a virus within teams, with the capacity to “upset or spoil the whole apple cart” (HRM Guide, 2008, pg. 1).

With regards to constituent emotions felt in the short-term after anger incident, participants said they felt better or motivated. Similar findings were also found by Averill (1982), whereby participants believed that becoming angry had been beneficial as opposed to maladaptive. In addition, participants also said they felt guilt and embarrassment for expressing their anger and also hate for the offender. The finding that angry people feel hate towards the offender is in line with previous research too (Fitness, 2000). Researchers have suggested that feeling such constituent emotions are not good for the future relationship with the offender, but also they may drain the angry person of energy, leaving them unable to carry out their work effectively.

The finding that angry people feel guilt, embarrassment, hate, frustrated, upset and sick would no doubt concur with the findings, that feelings of anger could be more harmful than beneficial (Glomb & Hulin, 1997). These findings also provide evidence to support the suggestion that anger does not occur in isolation (Engebretson et al.1999; Fitness,

2000) and angry people become frustrated following anger incidents (Thomas et al. 1998).

### *Consequences of anger - long-term*

With the long-term consequences of anger incidents, quitting or seriously thinking about quitting, are in line with the proposals set out by Weiss and Cropanzano's (1996) Affective Events Theory. This suggests that the accumulation of emotions over time affect job attitudes which lead to judgement driven behaviours such as quitting. Although, it is unknown what part job attitudes had to play in the unfolding process leading up to quitting, it could be that the apparent culmination of an event (e.g. continually being excluded from making important decisions or continually feeling that circumstances at work were not going to change) caused the angry person eventually to quit or seriously think about quitting their job.

The literature on chronic anger (Gibson & Barsade, 1999) suggests that a quarter of workers may be experiencing chronic anger. In this study, a third of all participants had or was experiencing chronic anger. As Gibson and Barsade (1999) have highlighted, feeling chronically angry can lead not only to stress for the individual but also have a negative effect on job satisfaction, which as already mentioned above, could lead to behaviours such as quitting. Furthermore, anger incidents causing ill health after experiencing an anger incident that has not been resolved, or experiencing chronic anger, highlights the importance of not ignoring on-going anger (Gibson & Barsade, 1999).

The constituent emotions of resentment for the offender, being constantly upset, dreading going to work, feeling depressed, feeling stressed, losing confidence and feeling disillusioned and less inclined to work all highlight the fact that anger can turn in to other feelings, which the angry person experiences long after the anger incident initially occurred. Previous research has also found that anger can lead to depression, disillusionment, loss of confidence, and stress (Fitness, 2000; Engebretson et al; 1999 Grandey, 2000 & Thomas et al. 1996) and that this in turn can to a variety of mental and physical illness.

As previously thought, social support, (i.e., being able to tell others about an angry incident) and incident resolved were identified as emergent themes in the analysis. Social support is recognised as behaviour which plays a potentially significant role in the outcome of workplace anger incidents by acting as a buffer against stress and other negative outcomes (Fitness, 2000; Grandey, 2000). Furthermore, many participants in this study perceived that the incident had not been successfully resolved. This is not a good omen for the future relationships of work colleagues (Fitness, 2000). People who do not perceive their anger incidents to be successfully resolved may feel take out revenge on the offender or organisation. Furthermore, the ongoing feelings of anger may lead to other feelings, such as hate, which is likely to make the situation between the offender and angry person even worse.

As with previous research the accumulation of participant's anger over time led to an eventual explosion of anger (Thomas et al. 1998). In particular, experiencing trivial incidents, points to the message given by Ashkanasy et al. (2002) that minor events may eventually cause problems and if left alone may snowball into much larger issues.

It probably comes as no surprise that mood prior to an anger incident may have an effect on the anger incident as dispositional affectivity, has been associated with positive and negative affective reactions in previous research with positive affectivity being related to positive affective reactions, and negative affect being related to negative affective reactions (Fisher, 2002b). In addition, and consistent with previous research, stress prior to anger was thought to be associated with becoming angry. Thomas et al. (1998) found that women felt stressed by multiple demands on them and lack of reciprocity which was associated to subsequently becoming anger.

Finally, other emergent themes have provided new areas of concern for the unfolding process of anger incidents, such as, feeling inadequately trained to deal with anger, new school versus old school, incident taken seriously and absenteeism. Absenteeism is a particular worry for many organisations, as are its relation to decreased productivity and increased costs. However, it is probably no great revelation that people are taking time off work as a result of feeling angry as research has suggested that the consequences of the experiencing anger, its expression, suppression and subsequent faking of other emotions, can have such dire effects on the individual's health (Dahlen and



Deffenbacher, 2001; Deffenbacher et al. 2000; Leineweber et al. 2009; Grandey, 2000; Mann, 1999).

#### **4.10 CHAPTER SUMMARY**

This research not only supports previous research on anger and its causes, but it has also found that there are many other causes to workers' anger. In addition, characteristics of anger incidents have highlighted the fact that participants in this study were experiencing anger frequently at work and that they may deal with their anger in many different ways. Expressing anger included verbal expression in an abusive or non-abusive manner towards the offender, using body language alone to express anger or ultimately physical aggression. Conversely, suppression of anger resulted in participants keeping their anger in and not letting others know that they were angry and faking of emotion was also associated with anger incidents.

Short-term consequences of anger led to participants carrying out a number of behaviours; some adaptive, some maladaptive. For example, while some sought to negotiate a resolution with the offender, others took out revenge. More surprising were the long-term consequences of anger incidents, especially the number of participants quitting or seriously thinking from their job. In addition, chronic anger was common among the participants, and the ill effect anger at work was having in participants' home life has been highlighted in the interviews. These results suggest that the long-term consequences of anger may be having detrimental effects on workers and highlight the need for management and organisations to take action, as not only is the individual affected, but the organisation could lose out through loss of productivity or high turnover.

The results from the study also suggest that participants are experiencing constituent emotions in relation to anger incidents; both at the short-term stage and long-term stage. This suggests that it is indeed important to carry out further research into the consequences of anger and for researchers to note that feelings of anger may alter in time, for example, from anger to depression. Managers may therefore be misinterpreting the feelings of workers and may be neglecting the root cause of their workers' problems. This also highlights the need for real time measures of anger to be

taken as opposed to retrospective measures, as these may not capture the dynamics of anger incidents.

With regards to new themes that emerged from the data, the analyses show that there are certain aspects of anger incidents which may influence the occurrence of an anger incident, prolong anger, or have an effect on the outcome of an incident. For example, it has been recognised that having social support may affect the outcome of incidents. However, more information is needed to find out if this does affect the unfolding process of anger or not, and if so, where in the chain of events it fits. The findings from this study suggest that if participants spoke to someone about the incident, then this seemed to reduce the amount of anger a participant felt, reduce the amount of time they felt angry towards an offender and also affect how the participant felt and behaved afterwards. Findings such as these, will not only help in the construction of the theoretical model but will also facilitate the construction of new hypotheses in future research and help workers reduce their anger.

In addition, the results from the interviews have provided data for the expansion of the conceptual framework. Furthermore, following the macro structure of AET and previous research on anger, this will enable the integration of the themes into the framework and the resulting theoretical model being developed. It is from this model and the interviews that the items for the diary will be able to be developed.

## **CHAPTER 5**

### **AN EXPLANATION OF HOW THE THEORETICAL MODEL AND THE ITEMS FOR THE ANGER DIARY WERE DEVELOPED.**

#### **5.1 OUTLINE OF THE CHAPTER**

The purpose of this chapter is to provide an explanation of how the theoretical model was built from the analysis in study one and how the items for the anger diary were subsequently developed. In addition, the results from study one: the interviews, have enabled the researcher to develop more specific questions and predictions for study two: the anger diary. Thus the theoretical model can be seen as a refinement of the conceptual model, which not only includes the general insights regarding the causes, characteristics and consequences of workplace anger, but also the more refined theories regarding specific relationships between the expression and suppression of anger and certain elements of the model. Following a description of how the theoretical model and diary items were developed, the aims for study two: the anger diary will be presented.

#### **5.2 BUILDING A THEORETICAL MODEL**

The point of building a theoretical model for this study was to provide an overall picture of people's experiences of anger. As Houkes, Janssen, de Jonge and Bakker (2003) state:

A theoretical model contains narrowly bounded specific variables, postulates relationships between these specific variables and is predictive in nature. These models are testable, yet sufficiently general to be sufficiently interesting (pg. 428).

Although no strict guidelines are set out for researchers embarking on exploratory qualitative research, the researcher followed the suggestions laid out by Miles and Huberman (1994) which as already mentioned involved the use of a multiple case study approach, using the tools of descriptive, interpretive and pattern coding to reduce the data in to categories, sub-categories and themes. The next stage of this process is to use data displays in which a preliminary model is produced, followed by a causal model

whereby conclusions are drawn from the analysis of the data and preliminary model, and the theoretical model is finally built. This process is described below.

### **5.2.1 Using two stages to build the model: A preliminary model and a causal model**

Although the conceptual framework was relatively specific about how the process of anger unfolds, the researcher still had to be open to new findings and be ready to confirm findings. Therefore, in order to build and expand the model the researcher followed the advice of Miles and Huberman, (1994) who suggest that in order to build the model, one should move from a variable oriented analysis to a process oriented analysis. In order to do this, it is suggested that the model should be ordered temporally. By this, it is meant the researcher had to distinguish which variables of those found relevant occur first in time during anger incidents, which occurred along the way, and which might be seen as early and later outcomes of anger incidents. Also, the researcher had to consider which variables might reasonably be expected to have a direct impact on other variables within the model, both preceding them and having a possible direct connection, and involved looking at the mechanisms that could be involved. In addition and as further suggested by Miles and Huberman (1994), participants' explanations were checked again, to see what they believed to be the cause of linkages.

Therefore, based on the above suggestions, the theoretical model was produced in two stages. The first stage began with a preliminary model, which identified and included all the variables from the analysis and helped to create the structure of the model. In the second stage, a causal model was built, which included the processes between variables. Thus, in the causal model, arrows mirror the empirical findings and show the possible causal connections.

#### ***Data display***

##### **A Preliminary model: a variable oriented analysis**

In order to start to develop and expand the theoretical model a preliminary model was first produced. See figure 5 for the preliminary model.

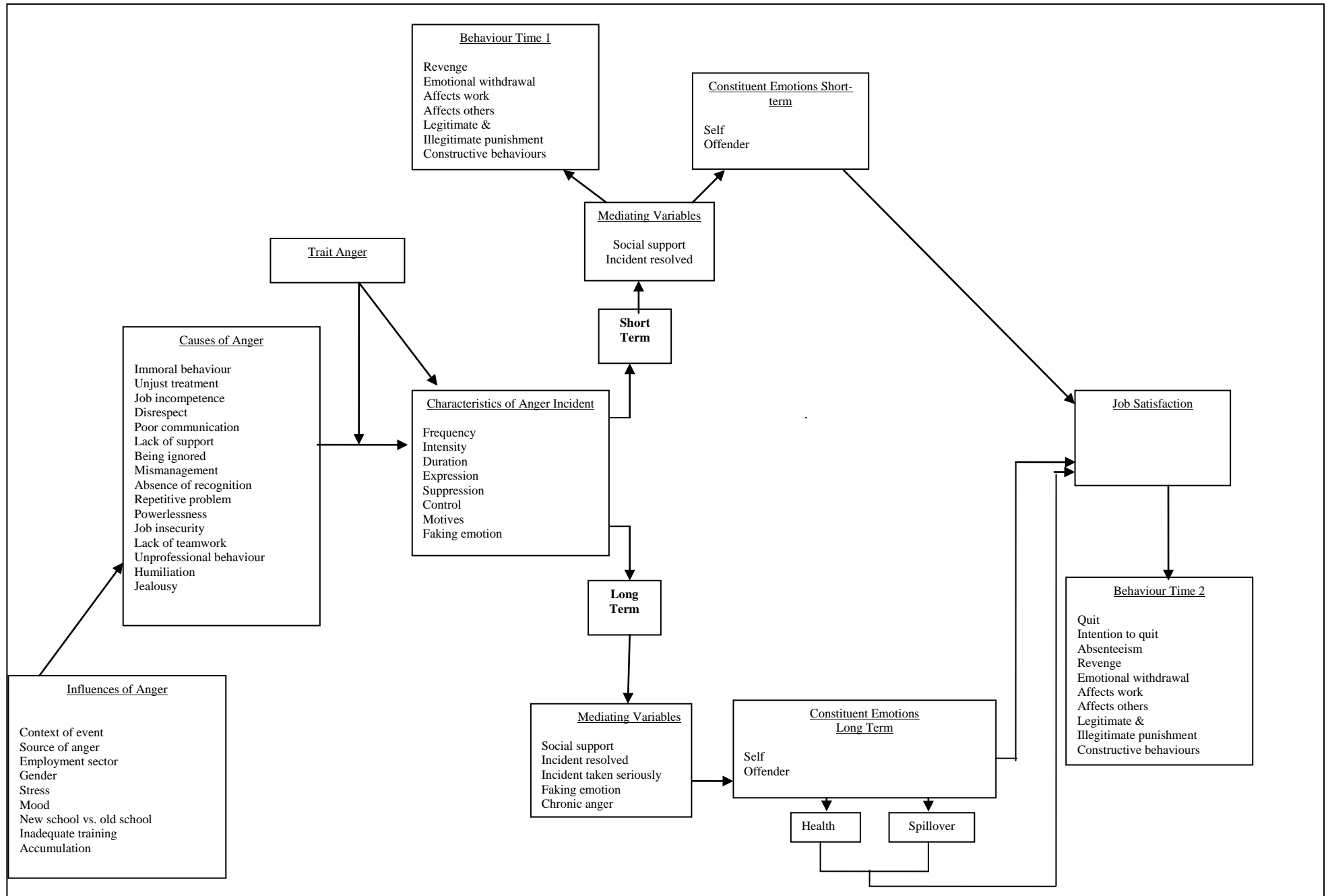


Figure 5: Preliminary model

Building the preliminary model, allowed for the structural elements of the model to be put in place and the factors and variables (i.e. the categories, sub-categories and themes) that were identified in study one: the interviews, to be placed in what the researcher thought to be the most appropriate boxes. A description of how this was carried out follows.

Initially, in study one: the interviews, the transcribed interview sheets had been analysed by hand and using NVivo software to reduce the data into a list of categories, sub categories, sub-sub-categories and themes. In addition to the analysis of data by hand, NVivo software was used to store and explore the codes, categories, sub-categories and themes further. However, in order to continue the building of the theoretical model the researcher needed to display all the variables identified throughout the analysis. This is done through data display and it involves producing a chart so that a synopsis of the written text can be produced in visual format. Thus, the researcher can see all the variables in a compact format all together.

#### **Using displays to build the model**

Displays and diagrams, with categories, themes and links, are powerful ways to discover connections (Crabtree and Miller, 1999) and help in identifying how variables interact and enable the researcher to plot anger incidents over time. A straightforward use of cards with examples of text and notes which gave examples of categories, subcategories and themes, and links were produced to help the researcher go back and forth constantly looking at the data to eventually come up with an explanation. Once the model was built the categories and themes were checked against the data. In addition, labels of categories and themes were edited if thought necessary.

Next, variables were identified that went together and that were distinct from other variables, and underlying themes and patterns were identified. Subsequently distinct variables were then identified and integrated into the model and placed in existing boxes or new boxes within the model. Hence, during this stage the researcher had to keep an open mind to changes that might occur in the expanding framework as a result of the findings from study one. Therefore, if a finding (i.e. category, sub category or theme) did not fit into one of the already existing boxes in the model it was not automatically left out; instead the model would be modified to accommodate such finding and new boxes would be introduced to the model. For example, spillover was considered by the

researcher to be a result of experiencing long-term feelings of anger which could lead to feelings of depression and anxiety and have an effect on the angry person's home life. Therefore, spillover was placed in the long-term consequences of anger after constituent emotions in the preliminary model.

### *Adaptation of model*

Due to the rather large size that the model had grown to, from analysing the data in study one, the researcher had to omit certain elements of the theoretical model from the second stage of the research. An explanation of why this had to come about follows.

### **Omitting short and long-term consequences of anger incidents from the current study**

It was at this stage that the decision was made to make alterations to the theoretical model and thus what would be collected in study two: the anger diary. These alterations are as follows:

1. To leave the short-term consequences in the theoretical model, and collect data on the short-term consequences of anger incidents, but not analyse them at this stage.
2. To omit the long-term consequences of anger incidents from the theoretical model completely and not develop items for the long-term consequences at all.

This decision was purely based on the unexpected size that the theoretical model had expanded to from the original conceptual framework at the beginning of the study. As the study was exploratory, it was not known how much data would be collected and need to be analysed in study one, and as it turned out, this proved to be too much to carry over in to study two.

Furthermore, the time restrictions governing the PhD meant that there simply was not enough time to collect and analyse data on all the factors and covariates, especially those factors dealing with long-term consequences of anger that were in the structural model. Therefore the model was altered and modified to include only those variables

needed to develop the anger diary. These changes can be seen in the causal model (see figure 6).

However, the results from the short-term consequences will be left in the causal model and will be incorporated into the anger diary. Although data will be gathered on the short-term consequences they will not be used at this stage. The reasons for this are provided below.

The main aim of the study was to collect information on people's experiences of anger in real time and investigate all aspects of anger incidents (i.e. the causes, characteristics and consequences of anger) together; that is the entire process, from beginning to end. Therefore, by not collecting all the information at once would defeat the main object of the study. Collecting all the information at the same time allows a story to be built up as to what processes are occurring during anger incidents and the mechanisms by which they happen. If the researcher were to go back at a later date and collect information on the short-term consequences of the same anger incidents experienced by participants it would miss the point of the research aims; that of collecting information in real time and over time. Therefore, collecting the consequences of anger at the same time as collecting other information on anger would enable results to be analysed at a later stage.

Nonetheless, the results from study one: the interviews, on the short-term and long-term consequences will not be redundant. Indeed they have already been incorporated into the preliminary model and can be used in future in research to add to our understanding of the long-term consequences of anger. As previously mentioned, ESM can provide rich data that can be continually accessed to investigate any phenomenon that the researchers wishes, and such data can either be used immediately to explore questions of interest or to test hypotheses, or it may even be used many years later (see Kubey et al. (1996) chapter 1: section 1.7.3 ).

Finally, the last phase of the analysis of the data from study one included conclusion drawing, which involved the researcher making final decisions about the meaning of the data and trying to verify and confirm the decisions made about the data (Miles and Huberman, 1994). See figure 6.



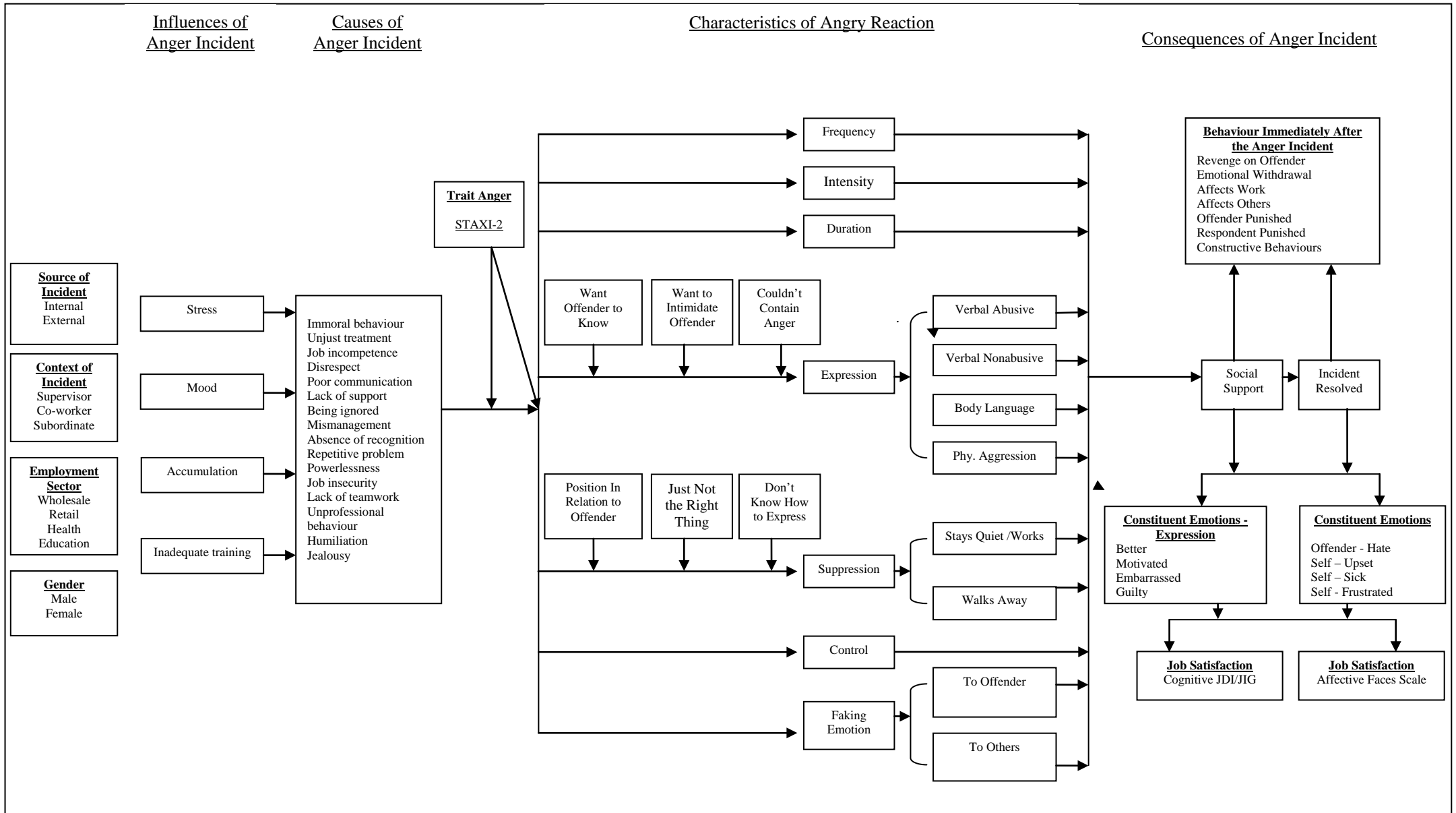


Figure 6: Causal model

## *Conclusion drawing*

### **The causal model: a process oriented analysis**

Following on from the preliminary model, the next stage of the theory building was to construct the causal model (see figure 6) which was a more detailed model and included all the processes of the variables. Miles and Huberman (1994) state that:

“A causal model is a network of variables with causal connections among them, drawn from multiple cases analyses. Although empirically grounded, it is essentially a higher order effort to derive a testable set of propositions about the complete network of variables and interrelationships. The principle is one of theory building” ( pg. 222).

### **Multiple cases**

In the above statement, Miles and Huberman (1994) highlight the importance of multiple cases in theory building and point out how such cases increase generalizability. Using multiple cases (e.g. employing managers and non managers from different employment sectors who interact with people in external and internal settings), aids reassurance that the anger incidents and processes in one well described setting, such as the health sector, are not entirely idiosyncratic. Looking at anger incidents and interactions in many different contexts and circumstances, not only adds confidence to findings but helps the researcher compare and contrast findings and help find out where, when and why anger incidents are likely to occur and the processes and outcomes of such incidents. At a deeper level, Miles and Huberman (1994) state that the aim is to “see processes and outcomes across many cases, to understand how they are qualified by local conditions, and thus to develop more sophisticated descriptions and more powerful explanations” (pg. 172). Hence, it is the systematic collection of anger incidents over time with the anger diary, in different employments sectors, with people who experience angry incidents with people from internal and external sources and at different levels, which will hopefully distinguish any similarities or differences between cases and calculate where and when anger incidents are most likely to occur or not occur.

Finally in order to complete the model, arrows leading to or coming from another box were added to illustrate the process of how the anger incident was believed to unfold.

In addition, categories can be used to precede or follow others. The researcher can then determine what triggers change and move into theory development (Morse, 1998). This is described in the following section together with how the development of the items for the anger diary was produced.

### **5.3 DEVELOPMENT OF THE DIARY ITEMS**

Emotion researchers have recently begun to stress the importance of looking at structure and processes when studying emotions, and believe that most traditional methods of studying emotions have only taken into account the structure element of emotions (i.e. stable traits) while overlooking the process of emotions (Lazarus and Yochi Cohen Cohen, 2001).

Despite this AET has been developed to study emotions (and moods) in real time over time. AET is based on the fundamental principle that affective states such as feeling angry can and do vary over time, and hence, the relationship between anger and behaviour must be studied over time too. However, no tools exist to measure emotions such as anger over time as they are experienced, hence one must be developed. Therefore, the specific aims of the event-structured diary are 1) to capture anger incidents in real time while they are hot and 2) to discover the process of anger incidents as they unfold over time.

The procedural details of how the diary is to be completed will be presented in the method section in the following chapter. However, for the purpose of consistency, the layout of the diary, the response format and the diary items will be included in this chapter.

#### **5.3.1 The diary items**

Once the categories, sub-categories and themes were divided into sections on the causes, characteristics and consequences of anger incidents and the model built and checked, they were then converted into items for the diary. This was done by actually examining each category, sub category and theme and looking at what the participants had actually said about their anger incidents. The researcher would then actually use the wording (or similar wording) used by participants about a particular incident. Thus,

following suggesting from Oppenheim (1992, as cited in Coyle and Williams, 2000) items for the anger diary were drawn in many cases from the actual words, or close approximations of the responses of participants. For example, the ‘causes of anger incident’ category was already in the conceptual framework. However, in order to develop the theoretical model and diary items the exact causes of anger had to be investigated. Some sub-categories had already been developed from the findings of previous research (e.g. unfair treatment and being humiliated from Fitness’ (2000) study); however, some new sub-categories were also developed from the analysis of the interview data, for example, ‘poor communication’. This sub-category was developed from bringing together all the segments or chunks of interview data which related to poor communication, and an item for the diary was developed from the segments or chunks of interview data. (All data was stored and retrieved in the appropriate way in NVivo software; thus access and retrieval of segments and chunks of data was not a problem).

Another example is provided from the consequences of anger and participants behaviour immediately after the anger incident. Items were developed for the diary that asked participants if they took revenge out on the offender. Questions such as ‘Did you deliberately go on a ‘go slow’ at work?’ and ‘Did you go behind their back to get what you wanted?’ were used. Again, these items were developed from the actual statements that participants had used in the interviews, to describe their behaviour in response to anger incidents.

In addition, emergent themes which were extracted from the interviews were also integrated into the model and subsequent items were developed. In order to illustrate this further, it was noticed that workers often spoke about feeling unprepared or unequipped to deal with anger incidents and it was such feelings that led the participant to become angry and subsequently react to the incident. Participants described their experiences in such terms as, *“trained to teach but not to manage”, “some basic training in how to deal with anger would have helped” “I don’t know how to deal with difficult students at school and this makes me become frustrated and angry quite often”*. Further consideration and reflection led the researcher to label the underlying variable ‘inadequately trained’ and make a box for it. The variable was seen to influence the occurrence of anger incidents and was therefore placed in the ‘anger influences’ section of the model with an arrow joining it to the ‘causes of anger incident’ box. As with the

item on the consequences of anger in the previous paragraph, an item for the diary was developed and put in section C of the anger diary, which asked participants about factors which they thought may have had an influence on the anger incident occurring. Therefore, an item was developed which asked participants if they felt inadequately trained to deal with such situations at work.

## **5.4 THE ANGER DIARY LAYOUT, RESPONSE FORMAT AND DIARY ITEMS**

### **5.4.1 Diary measures**

The daily diary contained questions about the participants' perception of their causes, characteristics and consequences of anger incidents. The items for the diary have been developed for the current study and are based on the theoretical model. The items for the diary are described below following a description of the response format, layout and distribution of the diaries.

The headings and sub-headings relate to the sections and variables within the model. Questions about each anger incident have been presented in a specific order so as to capture the dynamics and temporal sequencing of the anger incident as it may unfold.

### **5.4.2 Response format**

Initially it was expected that the diary would take approximately ten minutes to complete. However, as participants become familiar with the layout it would hopefully take less time to complete.

In addition, the response formats were designed to vary within each section in order to maintain participants' interest (Duck, 1991; Oppenheim, 2001). Furthermore, Alliger and Williams (1993) have proposed that a variation in the presentation of questions prevents participants from becoming sensitised to experiences of behaviours and reduces the chance of habituation. Hence, response formats were presented as simple selected responses (e.g. in checklist style response format) using a 'yes' or 'no' response and some were in a scaled response format, using either a five-point, eight-point or nine-point response scale. Additionally, some items had routing questions so

that more specific and precise information could be obtained from the participant about each anger incident and some questions were open format questions.

### **5.4.3 Layout of diary**

Conner and Waterman, (1996) suggest that response rates for questionnaires are improved by careful layout, logical ordering of questions and attractive presentation. Therefore, each anger diary was carefully put together and set in a plastic A5 folder to give it a professional appearance. It comprised a set of instructions, a completed sample copy of a diary entry, a list of pre-categorised causes of anger, together with codes so that participants could systematically record the cause of their anger, 20 lots of anger diary sheets and finally an end of study questionnaire. In addition, a removable calendar was placed in the back cover of the diary, which not only helped participants to keep track of the 20 days of the diary keeping period but also acted as a free draw ticket as it had the participants' free draw number on the back of it (see sample diary enclosed with thesis).

The diary has been divided into eight sections from A to H. Each section relates back to the model and concentrates on gathering information from the participant on specific areas within the model. Questions about the anger incident were written in what was thought to be a logical order with respect to how the anger incident would have unfolded. The repeated administration of the questions meant that the scales had to be kept brief (Totterdell, Wood & Wall, 2006).

### **5.4.4 Distribution of diaries**

Context and source is measured by asking who the offender was in the anger incident. In order to get a good spread of anger incidents with different offenders, half the diaries were given to participants holding managerial positions and half holding non-managerial positions. Employment sector was explored by trying to make sure that diaries were distributed to equal numbers of managers and non managers within the four different sectors.

## **5.5 THE ANGER DIARY ITEMS**

The following section looks at each specific section of the anger diary and describes how the items were developed from the category and themes within each section of the theoretical model.

### **5.5.1 Section A: Frequency, context and source**

#### *In the model*

##### **Frequency**

As previously mentioned in study one, the frequency with which people experience anger incidents is thought to be influenced by certain factors such as the context, source, sector, gender, the cause of anger and a person's trait anger. Hence, frequency of anger incidents is placed within the characteristics of anger incidents.

##### **Context and source**

Context and source of anger incidents is thought to have an influence on the anger incident. Although it is expected that context has quite a substantial effect on the anger incident it is not known how much the source of the incident has on the incident. Therefore, context and source are placed at the beginning of the model as they may influence every aspect of the anger incident.

#### *In the diary*

##### **Frequency of anger incidents**

To find out how frequently participants experienced an anger incident, participants were asked to record the date and month of the anger incident that each incident occurred (see figure 7 below).

##### **Context and source of incident**

In order to identify the context and source of the participants' anger, participants were asked to describe the nature of the offender's relationship with them. Participants could choose from: 1 (Superior/Manager/Supervisor); 2 (Co-worker); 3 (Subordinate); 4

(Customer/Client/Supplier); 5 (Patient); 6 (Student/Pupil) and Other (see figure 7 below).

<b>SECTION A.</b> This section is about <u>when</u> the anger incident took place and <u>who</u> it was with.			
<b>Date of incident:</b>	_____	_____	
	month	day	
<b>How would you describe the nature of your relationship with the offender? (circle one)</b>			
<b>He/she is your:</b>			
1	2	3	
Superior/Manager/Supervisor	Co-worker	Subordinate	
4	5	6	Other: _____
Customer/Client/Supplier	Patient	Student/Pupil	

Figure 7: The questions relating to frequency, context and source of anger incidents

### 5.5.2 Section B: Causes of anger

#### *In the model*

#### **Causes of anger**

The sub-categories identified as specific causes of anger incidents were firstly added to the main category of causes of anger incidents in the model. The arrows from the ‘causes of anger’ box lead to the ‘characteristics of angry reaction’. This suggests that the causes of anger can have an effect on the main variables in the ‘characteristics of angry reaction’, that is, the frequency, intensity and duration of anger incidents, the expression, suppression and control of anger incidents and faking emotion.

#### *In the diary*

#### **Cause of anger**

Following this the causes of anger that belonged to each sub-category were converted into examples of anger incidents for the event contingent diary. So for example, sub-category number 4 is ‘disrespect’. An explanation is given alongside this as to what it means “- the offender acted in a disrespectful manner to you or others”. Examples of specific behaviour for this sub category are provided in the diary: *a* You were overruled, *b* They were arrogant to you, *c* they were arrogant to others, *d* They were rude to you *e*



They were rude to others, *f* They used foul language, *g*, They were noisy and *h* They talked constantly.

This will help the participant to scan the causes of anger incident list quickly and enable them to easily choose from a list of possible causes to their anger each time they experienced an anger incident. Thus, to establish the cause of anger, section B of the anger diary asked participants to identify a cause of their anger (see figure 8).

**SECTION B. This section is about the cause of your anger. Look at the front of the diary for a list of causes and see which one is the same or similar to the cause of your anger.**

**EXAMPLE:** If you were angry because the offender criticised you in public then you would complete the questionnaire as follows:

**15. Humiliation – direct and public humiliation**  
a. the offender belittled you  
b. the offender criticised you in public

**1. What was the cause of your anger?**  
Number:  Letter:

**1. What was the cause of your anger? Please choose one.**  
Number:  Letter:

**2. Other causes of your anger that are not on the list. (Please specify):**  
\_\_\_\_\_

Figure 8: The question in the diary relating to the cause of anger

Participants were asked to choose one cause from a list of possible causes of their anger (see figure 9). If the cause was not on the list participants had the opportunity to specify the main cause of their anger. The list was split into 16 sections to make it easier for participants to find the relevant cause and each section contained a number of specific causes. Figure 9 shows the list for the causes of anger.

### **Causes of anger by context, source and sector**

It is essential to know what is actually causing people to become angry in the first place. As study one has already shown there are many different reasons. However, these causes may differ depending on context, the source of the anger and the employment sector. Hence, finding out the actual number of anger incidents which are caused by a certain incident will help researchers and managers to target those causes and prevent them from happening in the first place.

## **Causes of your anger**

### **1. Immoral behaviour- situations when the offender behaved in an unethical manner**

- a. They were lazy
- b. They didn't take responsibility for a mistake
- c. They constantly moaned
- d. They lied
- e. They cheated
- f. They stole something and got away with it
- g. They took advantage of you
- h. They took advantage of others
- i. They were having a sexual relationship with a colleague
- j. They misbehaved
- k. They exploited their position of authority
- l. They were constantly late
- m. They rang in sick and you suspected they were lying

### **2. Unjust treatment - you were treated unfairly by the offender**

- a. You were falsely accused of lying
- b. You were falsely accused of stealing
- c. You were accused of poor performance
- d. You were unjustly criticised
- e. You had a reasonable request denied
- f. You were given a heavy workload
- g. You were given an unreasonable request

### **3. Job incompetence - an incident, which although unintentional, cost you time and the organisation money or goodwill**

- a. The offender was particularly slow at carrying out a task
- b. The offender made a foolish mistake
- c. The offender didn't do their job properly

### **4. Disrespect – the offender acted in a disrespectful manner to you or others**

- a. You were overruled
- b. They were arrogant to you
- c. They were arrogant to others
- d. They were rude to you
- e. They were rude to others
- f. They used foul language
- g. They were noisy
- h. They talked constantly

### **5. Poor communication**

- a. You were excluded from a meeting
- b. You felt that you were not being told what was going on
- c. You were not given the chance to discuss important issues

Figure 9 (Items 1-5): A list of the causes of anger in the diary

**6. Lack of support**

- a. You didn't get any back up from a colleague in a difficult situation

**7. Being ignored**

- a. You had to ask several times for a job to be done
- b. You felt that you were not being listened to
- c. You were blatantly ignored

**8. Mismanagement**

- a. Others were not being managed correctly
- b. Your superiors worked in a disorganised fashion
- c. Your superiors do not know anything about your job

**9. Absence of recognition**

- a. You were not acknowledged for your hard work
- b. You were not rewarded for hard work
- c. You felt over qualified for a particular job

**10. A repetitive problem**

- a. An ongoing problem was not dealt with

**11. Powerlessness**

- a. You felt that you had no control over a situation because of matters out of your hands

**12. Job insecurity**

- a. You are angry about certain changes at work
- b. You feel insecure about your future at work
- c. You are fearful about redundancy

**13. Lack of team work**

- a. The offender is not working as a member of the team

**14. Unprofessional behaviour**

- a. The offender wasn't acting in a professional manner to you or others

**15. Humiliation – direct and public humiliation**

- a. The offender belittled you
- b. The offender criticised you in public

**16. Jealousy**

- a. The offender was granted some reward which you felt you deserved as well or instead

Figure 9: (Items 6 to 16) A list of the causes of anger in the diary

### 5.5.3 Section C: Influences of anger

#### *In the model*

##### **Stress, mood, new school vs. old, accumulation and inadequate training**

In study one it was discovered that participants believed that there could be possible factors which influenced the occurrence of anger incidents. These factors were, stress, mood, accumulation of anger, inadequate training and new school vs. old. (New school vs. old school was taken out of the model after completing the pilot study. Therefore it will not be seen in the revised model here).

The factors were placed in boxes under the category of influences of anger, prior to the causes of anger incidents box, and subsequent items were developed. Context, source, employment sector and gender were placed in new boxes prior to the influences of anger variables. This would ensure that context, source and sector could be explored as separate factors which could possibly influence over the entire anger incident. The arrows from these four boxes, stress, mood, accumulation and inadequate training lead directly to the 'causes of anger' box as it is thought that they could have an influence on the anger incident occurring in the first place.

#### *In the diary*

##### **Stress, mood, accumulation and inadequate training**

Section C of the diary asked about the factors thought to have contributed to the participants becoming angry in the first place were measured using four single item scales ranging from: 1 (Strong agreement) to 9 (Strong disagreement). Participants also had the opportunity to specify other factors which they thought could have contributed to them becoming angry (see figure 10 below).

**SECTION C.** This section is about factors which may have had an influence on the anger incident occurring.

**1. Which of the following factors do you think may have contributed to the incident happening in the first place? Indicate the extent to which you agree with the following:**

a. You were already stressed before the incident  
1-----2-----3-----4-----5-----6-----7-----8-----9  
Strong agreement Strong disagreement

b. You were already in a bad mood  
1-----2-----3-----4-----5-----6-----7-----8-----9  
Strong agreement Strong disagreement

c. You had let your anger build up and this was the incident that finally made you snap  
1-----2-----3-----4-----5-----6-----7-----8-----9  
Strong agreement Strong disagreement

d. You felt inadequately trained to deal with such situations  
1-----2-----3-----4-----5-----6-----7-----8-----9  
Strong agreement Strong disagreement

**2. Other factors which may have contributed to you feeling angry. (Please specify):**

---

Figure 10: The questions in the diary relating to the influences of anger

#### 5.5.4 Section D: Intensity and duration

*In the model*

##### Intensity and duration of anger incidents

As mentioned in study one, the intensity and duration of anger incidents needs to be examined in order to find out the extent that anger is being experienced at work. Intensity and duration of anger are within the characteristics of anger in the model and subsequent of items were developed.

*In the diary*

##### Anger intensity

Anger intensity was measured using a one-item scale which asked participants to rate how intense their anger was. Responses were recorded on a nine point scale ranging from 1 (very mild) to 9 (very intense; as angry as most people ever become).

### **Duration of anger incident**

The duration of the anger incident was measured by asking participants how long their anger lasted from when it first occurred. Participants were asked not to fill in the diary later than 24 hours after their anger first occurred so as not to affect recall accuracy about the anger incident. Participants were given seven response option categories that ranged from 'less than five minutes' to '1 day or more'. Providing the participants with a '1 day or more' response option ensured that data was still gathered from those participants who were still angry after 1 day from when their anger first occurred. As with all other incidents participants were still required to fill in the diary within 24 hours of the incident first occurring. These can be seen in section D, items 1 and 2 respectively of the anger diary (see figure 11).

**SECTION D. This section is about the intensity and duration of the anger incident.**

**1. How intense was your anger in the incident described above?**

1-----2-----3-----4-----5-----6-----7-----8-----9  
Very mild Very intense; as angry as most people ever become

**2. How long did your anger last when it first occurred? If your anger lasts more than 1 day fill this form in no later than 24 hours after your anger first occurred.**

less than 5 minutes   
5-10 minutes   
less than 1/2 hour   
less than 1 hour   
1-2 hours   
1/2 day   
1 day or more

Figure 11: The questions in of the diary relating to intensity and duration of anger

#### **5.5.5. Section E: Expression, suppression and control of anger.**

This section of the diary asked participants to complete one of three sub-sections depending on whether they expressed, suppressed or controlled their anger during the anger incident.

#### ***In the model***

#### **Expression of anger**

For the expression of anger, four types of expression were identified and are labelled in the model as: verbal abusive, verbal non-abusive, body language and physical aggression.

## *The diary items*

### **Expression of anger**

All the items developed for these behaviours are in section E under the heading Expressed Anger in the anger diary. Firstly verbal abusive was examined with items 2 a, b, c and d. Secondly, verbal non abusive was examined with items 2 e. Thirdly, the use of body language was examined with items 3 a and b and finally, the use of physical aggression was examined with items 4 a and b.

Expression of anger was assessed using 'yes' or 'no' responses to questions asking participants whether they verbally communicated with the offender, if they used their body language to show the offender they were angry or if they used physical aggression to show the offender they were angry.

The first set of questions in this section was on verbal communication. Four questions asked about whether participants spoke to the offender using 'abusive language'. For example, participants were asked if they used insults when communicating with the offender. One question asked if they spoke to the offender using 'non abusive language' and asked the participants if they talked calmly about the event to the offender.

Next, participants were asked two questions to find out if they used their body language to show the offender they were angry. Participants were asked if they stormed out on the offender or turned their back on the offender to show them they were angry.

Also, participants were asked two questions to find out if they used physical aggression to show the offender they were angry. Participants were asked if they caused any physical harm to the offender or used physical aggression towards an inanimate object.

See figure 12 below for a copy of the questions on expression of anger.

Section E. This section asks about your reaction DURING the anger incident. It asks whether you expressed your anger (you let it out), you suppressed your anger (you kept it in) or you controlled your anger (you attempted to monitor or prevent the expression of your angry feelings). Please complete ONLY ONE of the sections and complete ALL of the questions within that section. (Eg., if you expressed your anger just fill out the Expressed Anger section below and not the Suppressed Anger and Controlled Anger sections, then go on to Section F). Please read each section carefully before deciding which section to fill in.

<b>Section 1E.</b>		<b>Expressed Anger</b>	
<b>1. Did you express (let out) your anger to the offender or in front of the offender in any way during the anger incident?</b> (For example, if you <u>verbally communicated</u> with the offender, used your <u>body language</u> or <u>physically expressed</u> your anger towards the offender or inanimate objects you need to fill this section in).		Yes	No
		<input type="checkbox"/>	<input type="checkbox"/>
If YES, complete questions 2 to 6. If NO, go straight to question 7.			
<b>2. The questions below ask you how you <u>verbally communicated</u> with the offender to show them you were angry.</b>		Yes	No
a.	Did you speak in an angry tone to the offender?	<input type="checkbox"/>	<input type="checkbox"/>
b.	Did you shout at the offender?	<input type="checkbox"/>	<input type="checkbox"/>
c.	Did you use insults when communicating with the offender?	<input type="checkbox"/>	<input type="checkbox"/>
d.	Did you use offensive language when communicating with the offender?	<input type="checkbox"/>	<input type="checkbox"/>
e.	Did you talk calmly about the event to the offender?	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. The questions below ask you if you used your <u>body language</u> to show the offender you were angry.</b>		Yes	No
a.	Did you storm out of the office to show the offender they had made you angry?	<input type="checkbox"/>	<input type="checkbox"/>
b.	Did you turn your back on the offender to show them they had made you angry?	<input type="checkbox"/>	<input type="checkbox"/>
<b>4. The questions below ask you if you used <u>physical aggression</u> to show the offender you were angry.</b>		Yes	No
a.	Did you cause any physical harm to the offender?	<input type="checkbox"/>	<input type="checkbox"/>
b.	Did you use physical aggression towards an inanimate object? (e.g. kick, punch or slam the desk)	<input type="checkbox"/>	<input type="checkbox"/>

Figure 12: Questions relating to the expression of anger

### 5.5.6 Section E: Constituent emotions after expression of anger

#### *In the model*

#### Feelings after the expression of anger

Although constituent emotions is placed after expression of anger in the model, it was decided that for the anger diary it would be more appropriate to put these questions in immediately after asking about the participants' behaviour. So although the questions on constituent emotions or emotions following the expression of anger are placed here, they still remain the same in the model. However these items were not used in the analysis of the anger diary as they are part of the consequences of anger, which are not being analysed in this study.



## *Diary items*

### **Feelings after the expression of anger**

Firstly, participants were asked how they felt after expressing their anger. These were feelings which were only associated with the expression of anger and can be found in section on Expressed Anger. Items E 6 a, b, c and d examine whether the participant felt better, felt more motivated, felt embarrassed or felt guilty. Four single item scales were used to ask participants if they felt better, more motivated, embarrassed and guilty for expressing their anger. Responses were given on a five point scale, from 1 (not at all) to 5 (extremely). See figure 13 for a copy of the questions in the diary.

**6. How did you feel after expressing your anger?**

a. You felt better for expressing your anger  
1-----2-----3-----4-----5  
Not at all    Not really    Somewhat    Quite a bit    Extremely

b. You felt more motivated to work after expressing your anger  
1-----2-----3-----4-----5  
Not at all    Not really    Somewhat    Quite a bit    Extremely

c. You felt embarrassed about expressing your anger  
1-----2-----3-----4-----5  
Not at all    Not really    Somewhat    Quite a bit    Extremely

d. You felt guilty about expressing your anger  
1-----2-----3-----4-----5  
Not at all    Not really    Somewhat    Quite a bit    Extremely

Now go on to **Section F** please.

Figure 13: Questions relating to constituent emotions after expressing anger

### **5.5.7 Section E: Suppression of anger**

#### *In the model*

#### **Suppression of anger**

In order to find out how participants behaved when they suppressed their anger two items were used. These can be seen in the model as ‘stays quiet and works’ and ‘walks away’.

*In the diary*

**Suppression of anger**

In the diary suppression of anger was assessed using a ‘yes’ or ‘no’ response to two questions asking participants if they just stayed quiet and got on with their work and if they just walked away from the offender. Section 2E items 8 a and b respectively in the anger diary ask about suppression of anger and can be seen below in figure 14.

<b>Section 2E. Suppressed Anger</b>		<b>Yes</b>	<b>No</b>
<b>7. Did you suppress (keep in) your anger?</b> (For example, if you did not let the offender know that you were angry you need to fill this section in).		<input type="checkbox"/>	<input type="checkbox"/>
If <b>YES</b> , complete questions <b>8 and 9</b> . If <b>No</b> , go to question <b>10</b> .			
<b>8. When you suppressed your anger, how did you behave?</b>		<b>Yes</b>	<b>No</b>
a. Did you just stay quiet and get on with your work?		<input type="checkbox"/>	<input type="checkbox"/>
b. Did you just walk away from the offender?		<input type="checkbox"/>	<input type="checkbox"/>

Figure 14: Questions in the diary relating to the suppression of anger.

**5.5.8 Section E: Control of anger**

*In the model*

**Control of anger**

The analysis in study one revealed that participants who said that they controlled their anger during an incident did not react with any verbal or physical reactions. Rather than express or suppress anger and react with the associated behaviours, angry people who controlled their anger tended to use strategies to try and calm themselves down and prevent themselves from becoming overtly or covertly angry. They also felt that the anger incident did not affect their work or the relationship with the offender. Hence, control of anger is in the theoretical model but it is not associated with any behaviour immediately following the anger incident.

*Items in the diary*

**Control of anger**

Section 3E item 10 of the anger diary asked participants about the control of anger and was assessed using a ‘yes’ or ‘no’ response to a question asking participants if they

were totally in control of their anger during the incident. See figure 15 for a copy of the questions in the diary.

<b>Section 3E. Controlled Anger</b>		
<b>10. Did you feel that you were totally in control of your anger during the incident?</b>	<b>Yes</b>	<b>No</b>
	<input type="checkbox"/>	<input type="checkbox"/>
Now go to <b>Section F</b> please.		

Figure 15: Questions in the diary relating to the control of anger

### **Investigating the expression, suppression and control of anger incidents by context, source and sector**

Finding out about the number of incidents which involve the expression, suppression and control of anger in relation to context, source and employment sector will not only help to identify the actual occurrence of how people react to anger during an anger incident but if this is effected by who the offender is, whether the offender is from an internal or external setting and whether the incident takes place in a particular sector.

### **Investigating the occurrence of expressive and suppressive behaviour by context, source and sector**

Furthermore, investigating how participants behave in response to anger incidents will help identify how people deal with anger. In study one it was found that participants may express anger in a verbal abusive or non-abusive manner. In addition they may use body language to express their anger or physical aggression. With suppression of anger people either just stay quiet and get on with their work or walk away from the offender. Hence further investigation into the number of incidents involving expression, suppression and control in relation to their contexts, source and sector will be investigated. In addition, the investigation of expressive and suppressive behaviours by context, source and sector will be undertaken.

#### **5.5.9 Section E: Motivation for the expression and suppression of anger**

##### ***In the model***

### **Motives for the expression and suppression of anger**

As discovered in study one, there seemed to be several reasons proposed by participants for the motives for their expression and suppression of anger. Finding out these reasons

and if they have a bearing on people's anger expression and suppression will help us to understand why people express or suppress anger and therefore help managers to reduce its occurrence in the first place.

Motives for expressing or suppressing anger were placed in characteristics of angry reactions. Motives for the expression of anger were labelled as 'want offender to know what they had done', 'wanted to intimidate offender' and 'couldn't contain anger'. These were placed before the expression box. In addition motives for suppressing anger was labelled as 'position in relation to the offender', 'it's just not the right thing to do' and 'don't know how to express anger'. These were placed before the Suppression box and in order to examine why people suppress anger. The arrows for the motives of anger lead directly onto the 'expression' and 'suppression' of anger boxes. This is so the reasons for expressing and suppressing anger can be further investigated.

### *In the diary*

#### **Motivation for the expression of anger**

In order to examine the motivation for the expression of participants' anger towards an offender three single item scales were used asking why participants expressed their anger. The participants were asked if they wanted to intimidate the offender, they just could not contain their anger anymore or they wanted the offender to know what they had done. In order to examine why people express anger these three factors were investigated using 3 items in the expressed Anger section, section E question 5 items a, b and c respectively. Responses were given on a nine point scale from 1 (strong agreement) to 9 (strong disagreement). The items can be seen in figure 16 below.

<b>5. Why did you express your anger?</b>	
a. You wanted to intimidate your offender	
1-----2-----3-----4-----5-----6-----7-----8-----9	
Strong agreement	Strong disagreement
b. You just couldn't contain your anger anymore	
1-----2-----3-----4-----5-----6-----7-----8-----9	
Strong agreement	Strong disagreement
c. You wanted the offender to know what they had done	
1-----2-----3-----4-----5-----6-----7-----8-----9	
Strong agreement	Strong disagreement

Figure 16: Questions in the diary asking about the motives of expression of anger

### **Motivation for the suppression of anger**

In order to examine participants' motivation for suppression of anger, three single item scales asked participants if expressing their anger is just not the right thing to do at work, they felt that their position in relation to the offender meant that they could not suppress their anger and they did not know how to express their anger in an appropriate way.

The three factors were investigated using 3 items in the Suppressed Anger section, section E questions 9 items a, b and c respectively. Responses were given on a nine point scale from 1 (strong agreement) to 9 (strong disagreement) and can be seen in figure 17 below.

<b>9. Why did you suppress your anger?</b>	
a. Because expressing your anger is just not the right thing to do at work	
1-----2-----3-----4-----5-----6-----7-----8-----9	
Strong agreement	Strong disagreement
b. You felt that your position in relation to the offender meant you couldn't express your anger	
1-----2-----3-----4-----5-----6-----7-----8-----9	
Strong agreement	Strong disagreement
c. You didn't know how to express your anger in an appropriate way	
1-----2-----3-----4-----5-----6-----7-----8-----9	
Strong agreement	Strong disagreement
Now go to <b>Section F</b> please.	

Figure 17: Questions in the diary asking about the motives for suppression of anger

### **5.5.10 Section F: Faking emotion**

#### ***In the model***

#### **Faking emotion**

In study one the researcher wanted to investigate if participants had performed emotional labour during anger incidents. It was found that some of the participants did indeed perform emotional labour, and that they performed it not only to the offender but also to others around them who did not have anything to do with the incident. This could suggest that in response to anger angry people have to work twice as hard to fake

their emotion which as already mentioned could have negative consequences for the respondent and the organisation.

Therefore, in this study the author attempted to assess if, and to what extent, participants performed emotional labour and if they performed it to the offender and other people around them who did not have anything to do with the incident. In the model, faking emotion is under characteristics of anger and is labelled as faking of emotion to either offender or to others. All the arrows from the 'characteristics of angry reaction' lead to 'social support' and 'incident resolved'. As mentioned below it is thought these two variables act as mediators to the behavioural consequences of anger and job satisfaction via constituent emotions.

### ***In the diary***

#### **Faking emotion**

In the diary faking emotion was measured using four single item scales. Measures were drawn from the Mann Emotional Labour Inventory developed by Mann (1997) and modified in order to find out how much during the encounter participants hid emotions from the offender or from others who had nothing to do with the incident.

#### **Items 1 and 2**

Section F items 1 and 2 of the anger diary asked participants about how much they tried to hide their anger from the offender and how much they tried to hide their anger from others. Participants responded to the first two items using an eight point response scale ranging from 1 (a lot) to 8 (not at all). See figure 18 below.

#### **Items 3 and 4**

Section F items 3 and 4 of the anger diary asked participants if, instead of expressing their anger to the offender or others who had nothing to do with the incident, they tried to express another emotion that they did not really feel. Responses were given on an eight point scale from 1 (agree) to 8 (disagree). See figure 18 below.

**Section F. This section is about faking emotion. Please answer all the questions.**

1. How much during the encounter did you hide (or try to hide) your anger from the offender?  
A lot 1-----2-----3-----4-----5-----6-----7-----8 None at all
2. How much during the encounter did you hide (or try to hide) your anger from others (e.g. customers or coworkers) who had nothing to do with the incident?  
A lot 1-----2-----3-----4-----5-----6-----7-----8 None at all
3. Instead of expressing my anger to the offender I tried to express another emotion that I did not really feel  
Agree 1-----2-----3-----4-----5-----6-----7-----8 Disagree
4. Instead of expressing my anger to others who had nothing to do with the incident I tried to express another emotion that I did not really feel  
Agree 1-----2-----3-----4-----5-----6-----7-----8 Disagree

Figure 18: Questions in the diary asking about faking emotion

### **5.5.11 Section G: Short-term consequences of anger incidents**

The items in section G, deal with the consequences of anger incidents, including the angry persons' behaviour and constituent emotions following an anger incident, whether the incident was perceived as being resolved and whether the angry person received social support. Following this, section H explores the effects of anger incidents on the affective component of job satisfaction using a faces scale.

Although the items on consequences of anger, incident resolved and social support are in the diary, this will not be the focus of the study here as explained earlier on in this chapter. However, it is thought important that the reader knows why they are being studied and what their processes within the model are.

#### ***In the model***

#### **Short-term consequences of anger**

All the sub-categories which were identified as being actual behaviours in reaction to an anger incident were placed in the 'behaviour immediately after the anger incident' box in the model and again, as with the 'causes of anger incidents' the specific behaviours that belonged to each theme were converted into a list of behaviours which participants may have participated in following the anger incident. Again questions were placed in a

sub- category which summarised the questions being asked in each category in order to help participants to scan the diary page quickly and easily.

### *In the diary*

#### **Short-term consequences of anger**

Section G, items 1 to 7 of the anger diary examined the consequences of anger incidents. In this section, participants were asked how they behaved immediately after the anger incident.

Firstly, behaviours were divided into several different sections and each section asked numerous questions about how the incident affected the participants' behaviour. Sections asked participants if they took out revenge on the offender, if participants detached themselves emotionally from the offender, if the incident affected the participants' work, if the participants legitimately punished the offender following the incident and if the participants tried to rectify the situation.

Secondly, one section asked if the participants were punished over the incident and one section asked if the incident had had an effect on others who were not involved in the incident.

Finally, participants were given the opportunity to specify any other behaviour which the researcher may not have included in the section. Participants were given the choice of ticking more than one box from this section. See figure 19 below.



**Section G. This section is about how you behaved and felt immediately after the anger incident, that is, within 24 hours of the incident occurring. You may tick more than one box.**

**1. Did you take revenge out on the offender?**

- a. Did you assign them undesirable jobs?
- b. Did you talk about them behind their back?
- c. Did you spread gossip about them?
- d. Did you spread lies about them?
- e. Did you sabotage their work?
- f. Did you deliberately go on a 'go slow' at work?
- g. Did you avoid doing any work for the offender?
- h. Did you boycott meetings, talks or events?
- i. Did you refuse to do any overtime?
- j. Did you go behind their back to get what you wanted?

**2. Did you detach yourself emotionally from the offender?**

- a. Did you ignore the offender?
- b. Did you give them the silent treatment?
- c. Did you give them the cold shoulder?

**3. Did the incident affect your work?**

- a. Did your work output decrease because of the incident?
- b. Did you lose your ability to concentrate?
- c. Did your work deteriorate because of the incident?

**4. Did the incident affect others at work who were not involved in the incident?**

- a. Did it create a bad atmosphere at work for your colleagues?
- b. Did it make it difficult for people to work with each other?

**5. Did you legitimately punish the offender?**

- a. Did you appeal to higher authorities?
- b. Did you give the offender a warning, demotion or dismissal?

**6. Were you punished over the incident?**

- a. Were you given a warning, demotion or dismissal?

**7. Did you try to rectify the situation?**

- a. Did you accept an apology?
- b. Did you actively negotiate a resolution?

**8. Other (please specify):**

---

**9. Regardless of whether you expressed, suppressed or controlled your anger at the time of the incident, how did you feel afterwards?**

- a. You felt hatred for the offender  

1-----2-----3-----4-----5
Not at all      Not really      Somewhat      Quite a bit      A great deal

Figure 19: Questions in the diary relating to short-term consequences of anger

**5.5.12 Section G: Constituent emotions**

*In the model*

### **Constituent emotions**

Constituent emotions for consequences of anger incidents were identified as being emotions which participants felt specifically after expressing their anger or felt regardless of how they expressed their anger for the offender or for themselves immediately after the incident.

In the model, one box is placed in the consequences of anger section and is labelled 'constituent emotions – expression' and relates to emotions felt for those participants who chose to express their emotion. These, as already mentioned, were placed in section E: Question number 6 and followed the questions on expression of anger.

The other box is labelled 'constituent emotions' and relates to emotions felt for the offender and the self irrespective of how they reacted while angry. In addition, other feelings which could be associated with the expression, the suppression or the control of anger and may have been felt after the anger incident were explored. This included looking at whether the participant felt hate for the offender, felt upset, physically sick or felt frustrated.

### ***In the diary***

### **Constituent emotions**

Feelings after the incident, regardless of whether the participants expressed, suppressed or controlled their anger, were measured using four single item scales which examined if the participants felt hatred for the offender, felt upset about the incident, felt physically sick about the incident and felt frustrated about the incident.

Section G items a, b, c and d examine these constituent emotions for the offender and for self. Responses were given on a five-point scale from 1 (not at all) to 5 (a great deal). See figure 20 below.

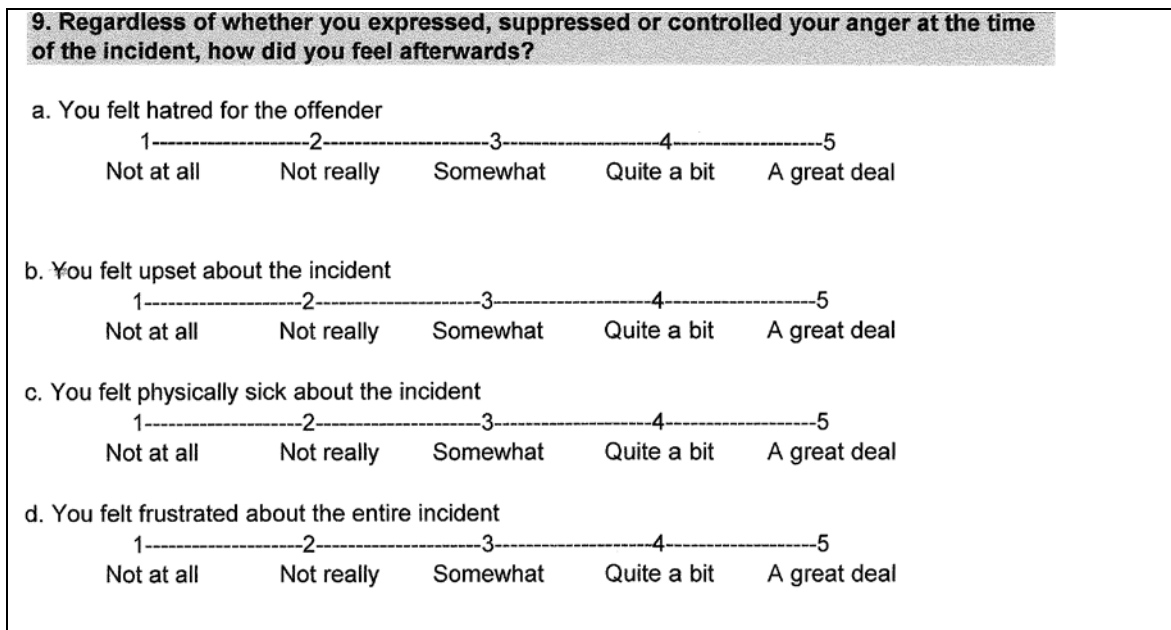


Figure 20: Questions in the diary relating to constituent emotions

### 5.5.13 Section G: Incident resolved and social support

#### *In the model*

It was difficult to predict how these two factors would affect the incident or if they would at all. However, it seems from the analyses in study one that they act as mediators to the consequences of anger incidents, that is, the immediate behaviour, constituent emotions and job satisfaction. Therefore they have been integrated into the model and subsequent items for the diary have been developed.

As explained above, the arrows for these two variables go from the ‘characteristics of angry reaction’ into the ‘consequences of anger incident’ section. From here, the variables act as mediators to ‘behaviour immediately after the anger incident’. It is thought (Fitness, 2000; Grandey , 2000) that if angry people receive social support they are less likely to engage in the behaviours found within the box. The same will apply when the angry person perceives the incident to be resolved soon after it has happened and therefore they do not engage in the behaviours. Furthermore, social support and incident resolved may have an effect on job satisfaction via constituent emotions. For example, if an angry person has expressed their anger they may feel subsequently guilty or embarrassed. In addition they may also feel upset and frustrated. This in turn may affect how they feel about their job, cognitively or affectively. However, if they receive social support or perceive that the incident has been resolved, these effects may

diminish and the effects may not be as strong or even cease to exist. This in turn may reduce the effect on job satisfaction.

*In the diary*

**Incident resolved**

Successful resolution of the anger incident was measured using two single item scales that asked participants to indicate the extent to which they agreed that they felt the incident had been sorted out and that they felt their relationship with the offender was back to normal.

**Social support**

Social support was assessed using a ‘yes’ or ‘no’ response to a question asking participants whether they discussed the incident with a third party. If participants did discuss the incident with a third party they were then asked to complete a one-item measure asking if they felt better for expressing their anger to a third person. The items developed for these two factors can be seen in section G of the anger diary . Questions 10 a and b relate to incident resolved and responses were given on a nine-point scale from 1 (strong agreement) to 9 (strong disagreement) and questions 11 a and b related to social support and responses were given on a five-point scale from 1 (not at all) to 5 (extremely). These questions can be seen in figure 21 below.

<b>10. Do you feel the incident has now been successfully resolved? Indicate the extent to which you agree with the following:</b>	
a. You feel the incident has been sorted out	
1-----2-----3-----4-----5-----6-----7-----8-----9	
Strong agreement	Strong disagreement
b. You feel your relationship with the offender is back to normal	
1-----2-----3-----4-----5-----6-----7-----8-----9	
Strong agreement	Strong disagreement
<b>11. Did you discuss the incident with a third party?</b>	<b>Yes No</b>
	<input type="checkbox"/> <input type="checkbox"/>
If <b>YES</b> , complete question (a) below, if <b>NO</b> go to section H.	
a. Did you feel better for expressing your anger to a third party?	
1-----2-----3-----4-----5	
Not at all	Not really Somewhat Quite a bit Extremely

Figure 21: Questions in the diary relating to incident resolved and social support

### **5.5.14 Section H: Job satisfaction – the faces scale**

#### *In the model*

AET suggests that work environment features may have both direct and indirect (via affective reactions) effects on job attitudes. The attitudinal variable of interest in this study is Job Satisfaction. Weiss and Cropanzano (1996) state that “job satisfaction and affect are not equivalent constructs” (page 11). Most measures of job satisfaction appear to include both cognitive and affective content (Brief, 1988), and AET suggests that cumulated affect experienced while working contributes to the latter component.

Furthermore, Fisher comments that most measures of job satisfaction only include cognitive aspects. Fisher (2002a) specifically looked at the relationship between aggregated real time affect and standard measures of overall satisfaction and proposed that, “As an attitude, job satisfaction should contain both cognitive and affective components though we often describe job satisfaction as “an affective response to one’s job” (page 3).

Therefore, Fisher (2002a) argues that researchers wishing to capture both affect at work and cognitions about work should consider using faces measures (see chapter one: section 2.15.6) or supplementing standard scales with separate scales designed to assess affect. One scale designed to measure affect in this way is the Faces Scale (Kunin, 1956). Hence using two measures, one to capture cognitions and the other to capture affect will ensure that both aspects of job satisfaction are captured. Therefore, the faces scale will measure affect and the JDI/JIG will capture the cognitive element.

In addition to finding out about the frequencies of anger incidents in relation to certain factors, the researcher is interested in exploring participants’ levels of job satisfaction which will hopefully provide clues as to how anger is associated to certain aspects of a person’s satisfaction at work. Hence different aspects of job satisfaction in relation to employment sectors will be investigated in the first part of the results

Job satisfaction is consequently placed at the end of the model and all arrows from ‘characteristics of angry reaction’ lead to it via ‘social support’, ‘incident resolved’ and ‘constituent emotions’ .

### *In the diary*

The faces scale was used to measure the affective component of job satisfaction. The faces scale was originally developed by Kunin (1955) to measure satisfaction without depending on verbal responses. The original single item scale consisted of 11 male faces with expressions ranging from a wide smile to a deep frown. Participants are asked to indicate the face which expresses how they feel about their job in general (Brief and Roberson, 1989). A modified version of the faces scale was used in the present study, using five genderless faces, ranging from an upward smile to indicate happiness and a downward mouth to indicate sadness. Participants were asked how the anger incident had made them feel about their job overall and asked participants to respond by ticking one of five boxes underneath a face with incremental variations from happiness to sadness.

As with the other consequences of anger incidents within the diary measuring the affective component of job satisfaction with the faces scale will not be included in this present study. However as with the previous sections it is thought pertinent that the reader understands why the items are included in the diary and model and that future questions could explore how anger incidents affect the affective component of job satisfaction. The Faces Scale, can be found in Section H 1 of the anger diary and can be seen in figure 22 below.

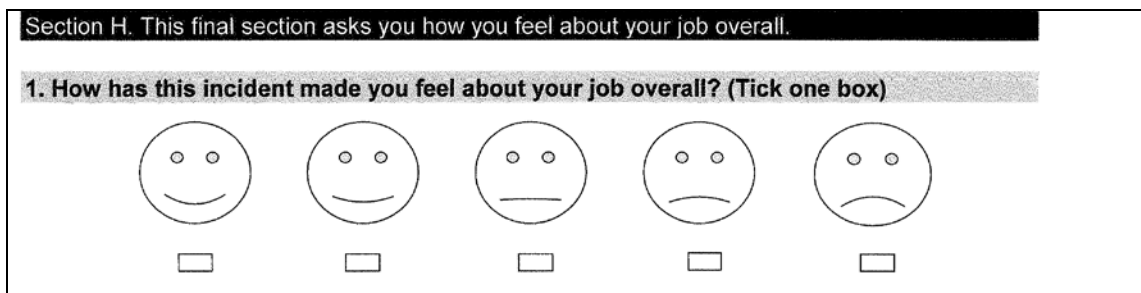


Figure 22: Questions in the diary relating to affective elements of job satisfaction

#### **5.5.15 End of diary questionnaire**

At the end of the diary-keeping period participants were asked to complete a final questionnaire in order to find out whether the diary-keeping period was atypical in any way compared to usual working life. As in other diary research questions about accuracy and omission in reporting were included after the diary-keeping period

(Tschan et al. 2005). This questionnaire consisted of 8 questions relating to the accuracy and omission of anger incidents. Participants were given the opportunity to add their own comments. See figure 23 for a copy of the end of study questionnaire. In addition to the two survey questionnaires (trait anger and job satisfaction) and the anger diary, participants were also provided with a pack containing instructions on how to complete all the information, a Participant Information Sheet, a Consent Form, a Personal Details Form and a Contact Information Form (see chapter 6: section 6.7). This Contact Information Form enabled the researcher to not only remind participants to complete their anger diary throughout the study but also allowed the researcher to contact all participants at the end of the study with the winning number of free draw.

**At the end of the DIARY KEEPING PERIOD, please complete this questionnaire.** (Please answer all questions by placing a cross in the appropriate box).

1. Were the anger incidents that you experienced during the diary keeping period typical of your usual work life?

i. A lot

ii. A little

iii. Not at all

2. How accurate were you in recording anger incidents during the diary keeping period? (For example, did you always record the correct information or did you sometimes forget and just guess?)

i. Very accurate

ii. Fairly accurate

iii. Fairly inaccurate

iv. Very inaccurate

3. How many anger incidents do you think you omitted?

i. None of them

ii. Only a few of them

iii. Quite a lot of them

iv. Nearly all of them

4. Did you find it difficult to complete the diary?

i. Yes  Go to 4a

ii. No  Go to Question 5

4a. Please say why you found it difficult? -----  
-----

5. Do you think overall the Anger Diary captured your experience of anger at work?

i. Yes

ii. No

6. Do you think that this method of diary keeping was better than a one-off questionnaire on anger at work?

i. Yes

ii. No

**Please turn over and complete the next page.**

7. During the diary keeping period did you fill the diary in within 24 hours of an anger incident first occurring?

- i. None of the time
- ii. Some of the time
- iii. Most of the time
- iv. All of the time

8. Please feel free to jot down any other comments on the diary study (good or bad!) in the space below. This will be greatly appreciated.

**Thank you for your time.**

**Please return this questionnaire back to me in one of the pre-paid addressed envelopes.**

Figure 23: End of diary questionnaire

## 5.6 AIMS FOR STUDY TWO

The questions and aims for study two are split into two sections and as such will be presented in two sections in the results. The first section will focus on an exploratory analysis of the data. This will entail an examination of frequencies of the data for each section of the anger diary and are a summary of the questions in the above section.



### **5.6.1 Summary of the questions for study two: section one**

#### ***Section A:***

How often do angry people experience anger incidents at work?

#### ***Section B:***

Overall what are the causes of anger work and do the causes vary depending on the context of the anger incident, the source of the anger incident and the employment sector in which the incident takes place in?

#### ***Section C:***

What is the frequency with which angry persons believe that stress, mood, accumulation and inadequate training are influencing the occurrence of anger incidents?

#### ***Section D:***

How long does a person's anger lasts when they do become angry and how is intense is the anger when it does occur?

#### ***Section E:***

Do the context, source and sector have an effect on whether the angry person expresses, suppresses or controls their anger?

What behaviours does the angry person engage in when they express or suppress their anger and do the context, source and sector have an effect on the angry person's behaviour?

Why do angry people decide to express or suppress their anger?

#### ***Section F:***

Finally, this section will examine the extent angry people are trying to hide their anger from the offender and others and how much they are trying to express another emotion to the offender or others that they do not feel.

Section two will deal with the expression and suppression of anger.

## 5.6.2 Aims for study two: section two

### *Contexts: the relationship with the offender<sup>2</sup>*

As previously mentioned power is thought to be an important factor in influencing anger episodes (Fitness, 2000). Therefore subordinates may be less likely to express, and more likely to suppress, anger to a manager or supervisor or a person holding a more powerful position than them, as there could be serious repercussion for the subordinate if they do express their anger. On the other hand managers and supervisors may be more likely to express anger to a subordinate or coworker and less likely to suppress anger as they may feel less likely to be reprimanded for doing so.

Within the context of anger incidents, the source of the incident can also be investigated. As already mentioned, previous research has shown mixed results for internal and external sources of anger and subsequent expression and suppression of anger. Finding out how people react to the sources of their anger may help to clarify what effect the offender of anger has on the angry person and the anger incident.

**Aim 1:** Therefore the first aim of Study Two: the anger diary is to explore how the context or rather the relationship with the offender and therefore the source of the incident has an effect on the expression and suppression of anger.

**Prediction 1:** Therefore it is expected that there will be an association between the relationship with the offender and simultaneously the source of the incident with the expression and suppression of anger. However, no specific prediction was made as to where the association would be.

### *Employment sectors: retail, wholesale, education and health.*

Due to the time and the resources involved in such data collection methods, most studies using ESM use small sample sizes and do not always use representative samples. Therefore, using people at different levels, (i.e. those holding managerial and non managerial positions) and people in different organisational sectors (i.e. retail,

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<sup>2</sup> Context and the term 'relationship with the offender' mean the same thing and will be used interchangeably from hereon

wholesale, health and education) may help to delineate the employment sectors which are more prone to anger expression or suppression.

**Aim 2:** Therefore the second aim of this second part of the study is to see whether working in a particular sector has an effect on workers' expression or suppression of anger

**Prediction:** It is expected that there will be an association between the employment sector and expression or suppression of anger. However, no specific prediction was made as to where the association would be.

### *Gender and anger*

The research on gender and anger is mixed hence it would seem logical to try and shed more light on this area.

**Aim 3:** Therefore, to further investigate the effects of gender on anger expression and suppression the effect of males and females on expression and suppression of anger will be examined.

**Prediction:** As the previous results are mixed with regards to anger expression and suppression, it is expected that there will be an association between gender and expression and suppression of anger. However, no specific prediction was made as to where the association would be.

### *Causes of anger*

In this section of the model, the author aimed to discover what anger incidents are occurring to create anger and what particular incidents are ending up in anger expression or suppression.

**Aim 4:** The third aim of the second part of this study is to examine the causes of anger at work and find out which incidents are occurring that lead to anger expression or suppression.

**Prediction:** It is expected that there will be an association between causes of anger and expression or suppression of anger. However, no specific prediction was made as to where the association would be.

***Influences of anger incidents: Stress, mood, accumulation and inadequate training***

Emergent themes in study one showed that there may be factors which may have contributed to the participant becoming angry in the first place. The researcher was therefore interested to know if participants were affected by these factors and if they also had an effect on the participant expressing or suppressing anger.

**Aim 5:** The fourth aim of the second part of this study is to examine the influences of stress, mood, accumulation and inadequate training on the expression and suppression of anger.

**Prediction:** It is expected that there will be an association between the causes of anger and expression or suppression of anger. However, no specific prediction was made as to where the association would be.

***Trait Anger***

According to AET individual differences can have an effect on affective reactions. Therefore, it was thought useful to examine the effects of trait anger on anger incidents and reactions.

**Aim 6:** To investigate the influences of trait anger on the expression and suppression of anger.

**Prediction:** It is expected that there will be an association between trait anger and expression and suppression of anger. However, no specific prediction was made as to where the association would be.

***Job satisfaction***

AET suggests that work environment features may have both direct and indirect (via affective reactions) effects on job attitudes. The attitudinal variable of interest in this study is Job Satisfaction. In this particular study the researcher is only looking at levels

of job satisfaction in relation to expression and suppression of anger. As job satisfaction is supposed to be a stable characteristic of one's job, job satisfaction and its association with anger can also be analysed as a predictor variable. Hence, it could be that people's job satisfaction is affecting their experiences of anger at work as well as the actual experience of anger affecting job satisfaction levels.

**Aim 7:** Therefore the next aim of this study is to assess whether there is a relationship between job satisfaction scores and anger expression and suppression

**Prediction:** It is expected that there will be an association between job satisfaction and expression and suppression of anger. However, no specific prediction was made as to where association would be.

### **5.6.3 Summary of aims**

In order to explore the extent and prevalence of anger at work the anger diary will allow for the frequencies of anger incidents in relation to the influences of anger, faking of emotion and motives for expression and suppression to be examined. In addition, the frequencies for the causes of anger, expression, suppression, control of anger and expressive and suppressive behaviour will be examined in relation to their contexts (i.e. the relationship with the offender), source and sectors. Finally, all aspects of job satisfaction will be examined by sector.

In order to examine what factors from the model are associated with expression and suppression of anger the context of the incident, the employment sector, the source of the incident and trait anger will be examined. Furthermore, stress, mood, accumulation of anger and inadequate training and job satisfaction will be examined to see if they too are associated with the expression and suppression of anger.

## **5.7 SUMMARY OF CHAPTER**

Currently, there is still relatively little known about workplace anger and what the antecedents and characteristics of it are, and its relationship to other organisational variables. Furthermore, the limited research on anger at work has not allowed for any theoretical developments in this area.

Hence, the purpose of this study was to describe the causes and characteristics of anger incidents in individuals employed full-time in retail, wholesale, education and health. Four sectors were selected for this study because research into emotions at work has mainly been concentrated in the service sector. Therefore looking at other sectors, other than the service sector, was thought to be even more beneficial in enhancing knowledge in this research area. In addition, all sectors have contact with internal and external sources of anger therefore enabling the researcher to examine the source of the participants' anger. Furthermore, results can also be compared across organisations to see if some occupations are more likely to be prone to anger incidents than others.

## CHAPTER 6

### METHOD FOR STUDY TWO: THE ANGER DIARIES

#### 6.1 RESEARCH METHODS AND DESIGN

An event sampling design was employed for the present study in order to further fundamental knowledge about the phenomenon of anger at work. Prior qualitative research and analysis methods were conducted and used to develop the quantitative measures and scales for the present study.

#### 6.2 PARTICIPANTS

264 participants were invited to take part in the study. Convenience sampling was used employing non-random procedures. However, to qualify for the study volunteers had to be in full-time employment. A quota sample was recruited whereby equal numbers of participants were chosen from each of the four sectors: retail, wholesale, education and health. In addition, half of the participants in each sector held managerial positions and half held non-managerial positions. The volunteers were given the opportunity to take part in a free draw to win £200 in cash for taking part in the study. In total, 187 participants took part in the study. Response rates for the study are dealt with in the next chapter (chapter 7: section 7.3)

##### 6.2.1 Demographic characteristics

The demographic characteristics of the participants are summarised in Table 6

Table 6: Demographic characteristics.

					FREQUENCY (N =187)	PERCENT
<i>Gender</i>						
	Female				101	54.0
	Male				86	46.0
<i>Organisational Sector</i>						
	Retail				62	33.2
	Wholesale				53	28.3
	Education				35	18.7
	Health				37	19.8
<i>Position Held</i>						
	Managerial/Supervisory				97	51.9
	Non-Managerial/Non-Supervisory				90	48.1

### **6.2.2 Gender**

Overall, table 6 shows that out of the 187 participants who took part in the study, just over half were female (54.0%).

### **6.2.3 Employment Sectors**

Table 6 shows that the majority of participants who took part in the study were from the retail (33.2%) and wholesale (28.3%) sectors, followed by the health (19.8%) and education sectors (18.7%).

Although the gender split was fairly equal in the retail sector (females 51.6% and males 48.4%) and education sector (females 51.4% and males 48.6%), it differed in the wholesale sector (females 35.8% and males 64.2%) and quite considerably in the health sector (females 86.5% and males 13.5%).

### **6.2.4 Position held**

Table 6 also shows that 51.9% of participants held a managerial position, of these 50.5% were female and of the 48.1% of participants that held a non- managerial position 57.8% were female.

### **6.2.5 Recruitment of participants within the four sectors**

When research is conducted in organisational settings, it is important to arrange advanced permission from the institutional organization (Kubey et al. 1996), so that participants' superiors, whether teachers, administrators, or employers, will permit full and complete sampling, save those incidents that the respondent wishes to ignore. This enables participants to feel free to complete anger incidents in what could be a very busy period at work without being reprimanded for doing so. Hence, recruitment of participants was carried out with the consent of H.R. or the management of the organisation.



### ***Health***

The participants were recruited through various initiatives. In health, in liaison with Research and Development Officers, posters inviting volunteers to take part in the research were placed in hospital corridors, staff rooms and ward notice boards. In addition adverts were placed on intranet web sites. In addition, the researcher was given permission to present their research at several audit meetings and simultaneously invite participants to take part in the study.

### ***Education***

Participants in Primary and Secondary schools and further and higher education were recruited by direct liaison with Head Teachers and Heads of Department. Again, the researcher was granted permission by the Head to present at staff meetings in order to recruit participants. In addition, personal contacts of the researcher were invited to take part, and the snowball technique was used.

### ***Wholesale***

Participants in two large organisations were recruited in this sector. Close work with Human Resources and Personnel Departments was carried out in order for the researcher to gain access to the organisations.

### ***Retail***

Participants from one large retail organisation were recruited from this sector. Once again, the researcher worked closely with the Human Resources department and the managers of each store, to recruit participants.

## **6.3 QUESTIONNAIRE MEASURES**

The two survey questionnaires that participants completed at the start of the study asked them about certain aspects of themselves and their work. The STAXI-2 (Spielberger, 1999) and JDI and JIG (Balzer, Kihm, Smith, Irwin, Bachiochi, Robie, Sinar and Parra, 2000) were used in this study, following manual instructions.

### 6.3.1 Trait anger

Anger was measured using the State Trait Anger Expression Inventory (STAXI-2; Spielberger, 1999). The STAXI-2 is a widely used scale that assesses the extent to which individuals experience, express and control their anger.

The State Trait Anger Expression Inventory, is said to provide the most psychometrically sound approach to measuring anger expression to date (Deffenbacher et al 1996). Deffenbacher et al. 1996 describe three forms of anger expression which have been defined in factor analytic studies: Anger-Out, the tendency to overtly express anger, usually in negative, aggressive ways; Anger-In the tendency to experience but suppress the overt expression of anger and Anger-Control, the tendency to be patient, calm, and modulate emotional and behavioural expression of anger.

Furthermore, Deffenbacher et al. (1996) propose that Anger-In and Anger-Control differ in that Anger-In describes the tendency to experience intense angry affect and stay aroused cognitively. Therefore, Anger-In individuals inhibit aggressive behaviour yet at the same time maintaining cognitive and emotional arousal. In comparison, although the behaviours which Anger Control individuals engage in are unclear, Anger-Control basically describes the tendency to engage in calming activities that lower arousal and calm the individual. Thus, Anger-Control individuals are said to lower the cognitive and emotional arousal which cues aggressive behaviour.

The 57- item STAXI-2 consists of six scales, five subscales, and an Anger Expression Index, which provides an overall measure of the expression and control of anger. For example, with regard to the anger expression scale which measures participants' suppression of angry feelings (AX/In) and expression of anger toward other persons or objects in the environment (AX/Out), participants are asked to indicate "how often you generally react or behave in the manner described when you feel angry or furious". In responding, participants rate themselves on the following four-point frequency scale: 1 = "Almost never," 2 = "Sometimes," 3 = "Often," 4 = "Almost always." Examples of anger expression scale items are:

AX/In: I keep things in; I boil inside, but I don't show it

AX/Out: I strike out at whatever infuriates me; I lose my temper.

An overview of the STAXI-2 scales and subscales can be found in table 7 following figure 24 below.

Permission was granted to use the STAXI-2. An example of some of the items is below. A full copy of the instrument can be found in appendix 7.

**Part 1 Directions**

A number of statements that people use to describe themselves are given below. Read each statement and then blacken the appropriate circle on the Rating Sheet to indicate how you feel *right now*. There are no right or wrong answers. Do not spend too much time on any one statement. Mark the answer that *best* describes your *present feelings*.

Fill in ① for <i>Not at all</i>	Fill in ② for <i>Somewhat</i>	Fill in ③ for <i>Moderately so</i>	Fill in ④ for <i>Very much so</i>
---------------------------------	-------------------------------	------------------------------------	-----------------------------------

**How I Feel Right Now**

---

1. I am furious
2. I feel irritated
3. I feel angry
4. I feel like yelling at somebody
5. I feel like breaking things
6. I am mad
7. I feel like banging on the table
8. I feel like hitting someone
9. I feel like swearing
10. I feel annoyed
11. I feel like kicking somebody
12. I feel like cursing out loud
13. I feel like screaming
14. I feel like pounding somebody
15. I feel like shouting out loud

**Part 2 Directions**

Read each of the following statements that people have used to describe themselves, and then blacken the appropriate circle to indicate how you *generally* feel or react. There are no right or wrong answers. Do not spend too much time on any one statement. Mark the answer that *best* describes how you *generally* feel or react.

Fill in ① for <i>Almost never</i>	Fill in ② for <i>Sometimes</i>	Fill in ③ for <i>Often</i>	Fill in ④ for <i>Almost always</i>
-----------------------------------	--------------------------------	----------------------------	------------------------------------

**How I Generally Feel**

---

16. I am quick tempered
17. I have a fiery temper
18. I am a hotheaded person
19. I get angry when I'm slowed down by others' mistakes
20. I feel annoyed when I am not given recognition for doing good work
21. I fly off the handle
22. When I get mad, I say nasty things
23. It makes me furious when I am criticized in front of others
24. When I get frustrated, I feel like hitting someone
25. I feel infuriated when I do a good job and get a poor evaluation

2

Figure 24: An example of the items from the STAXI-2

*Table 7: An overview of the STAXI-2 scales and subscales*

<b>STAXI-2 SCALE/SUBSCALE</b>	<b>NUMBER OF ITEMS</b>	<b>SCALE/SUBSCALE RANGE</b>	<b>DESCRIPTION OF SCALE/SUBSCALE</b>
<b>State Anger (<i>S-Anger</i>)</b>	15	15-60	Measures the intensity of angry feelings and the extent to which a person feels like expressing anger at a particular time
Feeling Angry ( <i>S-Ang/F</i> )	5	5-20	Measures the intensity of the angry feelings the person is currently experiencing
Feel Like Expressing Anger Verbally ( <i>S-Ang/V</i> )	5	5-20	Measures the intensity of current feelings related to the verbal expression of anger
Feel Like Expressing Anger Physically ( <i>S-Ang/P</i> )	5	5-20	Measures the intensity of current feelings related to the physical expression of anger
<b>Trait Anger (<i>T-Ang</i>)</b> Angry Temperament ( <i>T-Ang/R</i> )	10	10-40 4-16	Measures how often angry feelings are experienced over time Measures the disposition to experience anger without specific provocation
Angry Reaction ( <i>T-Ang/R</i> )	4	4-16	Measures the frequency that angry feelings are experienced in situations that involve frustration and/or negative evaluation
<b>Angry Expression-Out (<i>AX-O</i>)</b>	8	8-32	Measures how often angry feelings are expressed in verbally or physically aggressive behaviour
<b>Anger Expression-In (<i>AX-I</i>)</b>	8	8-32	Measures how often angry feelings are experienced but not expressed (suppressed)
<b>Anger Control-Out (<i>AC-O</i>)</b>	8	8-32	Measures how often a person controls the outward expression of angry feelings
<b>Anger Control-In (<i>AC-I</i>)</b>	8	8-32	Measures how often a person attempts to control angry feelings by calming down or cooling off
<b>Anger Expression Index (<i>AX Index</i>)</b>	32	0-96	Provides a general index of anger expression based on responses to the <i>AX-O</i> , <i>AX-I</i> , <i>AC-O</i> and <i>AC-I</i> items

### ***Validity and Reliability of the STAXI-2***

The validity and reliability of the STAXI-2 have been illustrated by Spielberger (1999). The validity of the STAXI-2 was illustrated by using concurrent validity. For the purpose of illustrating the concurrent validity of the STAXI instrument, Spielberger correlated the scale scores as well as the subscale scores with scores received from previously validated survey instruments. The scales that were correlated with the STAXI instrument included the Minnesota Multiphasic Personality Inventory (Hostility and Overt Hostility scales), Buss-Durkee Hostility Inventory, and the Eysenck Personality Questionnaire (Psychoticism and Neuroticism). Spielberger also illustrated the concurrent validity of the STAXI instrument by correlating the scaled scores and the subscale scores with elevated blood pressure and hypertension. The reliability of the STAXI-2 instrument was also illustrated by Spielberger (1999). The reliability of the STAXI-2 instrument was illustrated by calculating Cronbach's alpha coefficients for internal consistency. The total scale scores of the STAXI-2 had internal consistency reliability coefficients that ranged from a low of  $\alpha = .73$  to a high of  $\alpha = .95$ . The subscale scores of the STAXI-2 had internal consistency reliability coefficients that ranged from a low of  $\alpha = .73$  to a high of  $\alpha = .93$ . This provided evidence that the STAXI-2 survey instrument provided adequate measurements for overall anger, as well as for each subscale of anger.

### **6.3.2 Job Satisfaction**

Job satisfaction was measured using the Job Descriptive Index and the Job In General Scales (Balzer et al, 2000). The JDI and JIG are the most frequently used measures of job satisfaction and has been used by hundreds of organisations (DeMeuse, 1985; Zedeck, 1987 in Balzer et al., 2000). The JDI and JIG consists of 72 items and 18 items respectively. The JDI is comprised of five sub-subscales or facets: work itself, pay, opportunities for promotion, supervision and co-workers. The JIG reflects individuals' general feelings toward their jobs, encompassing all aspects of job satisfaction. For example, participants are asked to think about the work they do at present then describe how well a list of words or phrases describes their actual work. Participants respond by marking "Y" (yes), "N" (no) or "?" (Can not decide) to each word or phrase (see figure 25).

**WORK ON PRESENT JOB**

Think of the work you do at present. How well does each of the following words or phrases describe your work? Circle:

- 1 for "Yes" if it describes your work
- 2 for "No" if it does not describe it
- 3 for "?" if you cannot decide

	Y	N	?
Fascinating.....	1	2	3
Routine.....	1	2	3
Satisfying.....	1	2	3
Boring.....	1	2	3
Good.....	1	2	3
Gives sense of accomplishment.....	1	2	3
Respected.....	1	2	3
Uncomfortable.....	1	2	3
Pleasant.....	1	2	3
Useful.....	1	2	3
Challenging.....	1	2	3
Simple.....	1	2	3
Repetitive.....	1	2	3
Creative.....	1	2	3
Dull.....	1	2	3
Uninteresting.....	1	2	3
Can see results.....	1	2	3
Uses my abilities.....	1	2	3

Figure 25: Items from the JDI relating to work on the present job.

A full copy of the instrument can be found in appendix 8. Permission to use the JDI/JIG was obtained. In exchange for permission to use the test measures at no cost, the researcher had to agree to return the collected individual-level raw item response data to the JDI Research Group.

***Validity and Reliability of JDI and JIG***

The validity and reliability of both the JDI and JIG provide substantial evidence of reliability, convergent validity and discriminant validity (Balzer et al. 2000). The validity of the instruments was illustrated by using convergent validity by correlating the scores from the JIG with the Brayfield-Roth scale. It was found that there was a significant correlation between the JIG scale and the Brayfield-Roth scale. The correlations between the JIG and Brayfield-Roth scale ranged from a low of .66 to a high of .80. Additionally, the convergent validity of the instruments was illustrated by correlating the scores from the JIG with the Adjective scale. It was found that there was a significant correlation between the JIG scale and the Adjective scale. The correlation between the JIG and Adjective scale was equal to .76. The reliability of the JDI and JIG instruments were also illustrated by Van Saane, Sluiter, Verbeek and Frings-Dresen (2003). The reliability of the JDI and JIG instruments were illustrated by calculating Cronbach's alpha coefficients for internal consistency. The JDI had internal consistency

reliability coefficients that ranged from a low of  $\alpha = .84$  to a high of  $\alpha = .90$ . The JIG had an internal consistency reliability coefficient equal to  $\alpha = .91$ . This provided evidence that the JDI and JIG survey instruments provided adequate measurements for job satisfaction.

#### **6.3.4 Faces scale**

In addition to the JDI and JIG the faces scale was used and has already been described in the chapter 5. Permission was granted to use the faces scale.

#### ***Single item constructs: reliability and validity***

Single items in academic research are often considered to be a fatal error in the review process. However, if the construct being measured is sufficiently narrow or is unambiguous to the respondent a single item may suffice. Reichers and Hudy (1997) state that the use of single-item measures should not be considered fatal flaws in the review process and propose that it is reasonable to conclude that the single item measures are more robust than the scale measures of overall job satisfaction. Reichers and Hudy (1997) go on to state that a single item measure of overall job satisfaction is acceptable, especially if practical limitations favour the use of single item measure, for example, space on a questionnaire.

Furthermore, participants may resent being asked questions that appear to be repetitious and a single item is usually easier to understand and score. Other researchers also have a favourable posture toward one-item measures of global job satisfaction proposing that single item measures of job satisfaction appear to be preferable to multiple-item measures of facet satisfaction in that it is more efficient, is more cost effective, contains more face validity and it better able to measure changes in job satisfaction (Nagy, 2002; Scarpello & Campbell, 1983).

#### **6.4 ANONYMITY**

Questionnaire and diary responses were completely anonymous and participation was encouraged but voluntary. Anonymity in this study was particularly crucial due to the nature of the emotion being studied. As Fox and Spector recognized (1999) “employees

may rightly feel at risk in revealing behaviours which could result in loss of job or even prosecution. Any methodology that could result in identification of participants...violates the most fundamental principles of doing organizational research in organizations. Anonymous self-reports seems most likely to avoid these pitfalls” (page 929).

#### **6.4.1 Unique code**

It was important that participants were encouraged to be completely honest when completing diaries. Hence a technique called serial case numbering (Oppenheim, 2001) was employed. This means that each individual in the sample needs a number. This is essential if one person’s responses are not to get mixed up with those of another. To make such operations possible a numbering system was devised whereby each individual was given a unique code. The unique code was made up of four digits. The first digit represented the sector the participant worked in, followed by the second digit which represented the managerial position of the participant. The actual number of the participant was at the end of the code. This unique number was the only way that an identity can be given to each returned diary or diary pages and could subsequently be tied up to other relevant questionnaires and data collected prior to the diary keeping period. This unique code was also printed on the back of the calendar which was provided with each of the anger diaries. Participants were asked to keep this safe as it would be used at the end of the study as their free draw ticket and would be needed in order to claim the free draw prize if necessary.

### **6.5 PROCEDURE**

#### **6.5.1 Training Session**

As Bolger et al. (2003) point out with regards to diary studies, “It is important to consider what is known about their ‘limitations’...One practical concern is that diary studies often require detailed training sessions to ensure that participants fully understand the protocol” (page 591).

Therefore, individuals who volunteered to take part in the study were subsequently contacted to arrange a mutually suitable time for a session. The session took place on



either a one to one basis in the participant's place of work or arrangements were made with management to hold meetings with several volunteers at once.

In the session, the nature and purpose of the study was explained and a set of general instructions (see appendix 9) and Participant Information Sheet were handed out (see appendix 10). Those people who subsequently agreed to participate signed a Consent Form (see appendix 11). Following this, participants completed the Personal and Employment Details Form (see appendix 12) and Contact Details Form (see appendix 13). The Personal Details Form was kept simple as asking too much demographic information (Morse, 2008) may make it possible for a particular employee to be identified and could seriously affect whether the employees feel that their responses will be confidential.

The Contact Details Form enabled participants to leave their contact details so that the researcher could remind participants to complete the anger diary over the diary keeping period and thus try to keep a good rapport going with participants to encourage them to complete the study. This was placed in a sealed in a blank sealed envelope separate from all the other documents.

Participants were then asked to complete the STAXI-2 and JDI/JIG questionnaires. Once these were returned to the researcher, participants were given full instructions on how and when to complete the anger diary and participants were given the opportunity to raise any questions with the researcher.

### **6.5.2 When to complete the diary**

It is important that participants complete the diary as soon as possible after they feel the anger incident is over, and no one has to know about this but them: this was stressed to the participants in the training period (Wheeler and Reis, 1991). If the anger incident continues (e.g. the participant continually feels intense anger towards the offender of the anger incident) then participants are asked to complete the diary no later than twenty four hours after the incident began.

### **6.5.3 Event sampling period**

The period which a diary is to be kept needs to be long enough to capture a sufficient number of anger incidents without jeopardizing the successful completion of the diary by imposing an overly burdensome task for the participants (Corti, 1993). Previous studies have tended to use a two week period to collect information on emotions and moods. However it has been suggested that this is not long enough and that a longer time period would enable emotions such as anger to be captured (Fisher, 2000; Grandey, Tam and Brauburger, 2002) and later associated to other workplace variables. Hence participants are asked to fill in a diary sheet for every anger incident they experience over a four week working period or 20 full working days. They will also be provided with a calendar at the back of the diary so that they can keep track of the days they have had the diary.

### **6.5.4 Data Collection: Diaries**

An event-contingent approach was used to record anger incidents. However, because of the nature of some occupations (e.g. nurses) it was neither feasible nor appropriate for them to stop and record incidents of anger immediately after they occurred. Therefore, they were asked to record incidents as soon as possible, but within 24 hours of the anger incident occurring. By completing diary records immediately or as soon as possible after the anger incident the problem of recall accuracy was minimized but may not have been completely negated (see Bolger et al. 2003).

However, because of the risk of the prior days' responses in pencil and paper diaries being viewed by others in their environment, participants may hesitate to be completely truthful about their responses about interpersonal events and emotions. Nonetheless, this concern can be mitigated by asking participants to seal the pages of completed diaries (Bolger et al 2003) and making sure the diary pages are returned daily in envelopes. Alternatively the researcher can collect the diary pages in their sealed envelopes at several interim points in the study. Thus diaries were administered and collected to participants in one of two ways to ensure confidentiality and a maximum return rate.

Firstly, the researcher personally gave out the questionnaires and diaries and participants were asked to return the information by post in the pre-paid self-addressed

envelope provided. With this method, the participants were issued with 20 envelopes and asked to send the envelopes back to the researcher each time they completed a diary entry. However, during the research it became apparent that issuing out so many envelopes was becoming costly. Therefore, participants agreed that one envelope per week would suffice to return completed anger pages and agreed that this would not affect their confidentiality. Secondly, participants were given the choice to deposit completed diary pages in a sealed box, to reinforce confidentiality of the information. This was collected at the end of the diary keeping period by the researcher.

The study required participants to complete the diary questionnaire every time they experienced an anger incident at work over a period of 20 consecutive working days. Scheduled days off and absences from work were not included. Data collection spanned a total of 18 months. This took a lot longer than anticipated due to the permission needed from each organisation to carry out the study, the subsequent recruitment of participants and the arrangement of mutually convenient times for the researcher and participants to meet. Although working around participants in this was time consuming the researcher aimed to avoiding the self selection bias found in many studies that employ ESM. Hence sometimes this involved meeting participants in groups or sometimes on a one to one basis. For example, if participants working night shifts could not make the day time meeting then a separate meeting would need to be held late at night for those participants. Furthermore, the researcher would sometimes have to collect the diaries directly from the organisations or participants, sometimes having to return several times if participants had not left it for the researcher or had forgotten to send it directly back.

## **6.6 DESIGN OF THE DIARY**

### **6.6.1 Size of diary**

The diary itself had to be easily portable. Therefore an A5 size of diary was chosen and the pages were bound safely together so that it could easily be carried around in one piece. Furthermore the diary pages were easily removable for those participants who wanted to ensure the quick return of any completed diary sheets.

## **6.6.2 Instructions**

There was a clear set of instructions on how to complete the diary on the first page and an example of a completed diary page was featured on the second page. It was important that these instructions were clear, yet concise, as ESM is intrusive and participants need to feel that they are taking part in an important study in order to make sure they fill out the diary sheets when ever necessary and try not to miss out any anger incidents over the diary keeping period.

### ***Explanation of relevant terminology***

Included in the instructions was a clear explanation of any relevant terminology used throughout the diary (Corti, 1993) that the participant may be uncertain about including a description of anger. Although anger has been surprisingly hard to describe by many researchers (Robbins, 2000) Spielberger (1999) proposed the following definition:

“Anger is generally defined as an emotional state that consists of feelings that vary in intensity from mild irritation or annoyance to intense fury or rage” (pg.19)

It was thought by the researcher that this provided the necessary guidelines as to what anger was for the participants without going into superfluous detail. In addition the STAXI-2 (Spielberger, 1999) is being used in the study to measure anger so it was thought judicious to use the definition of anger provided by the author.

## **6.6.3 Reactance**

Reactance refers to a change in participants' experience or behaviour as a result of participation in a study. As it stands however there is little evidence to suggest that reactance poses a threat to the validity of diary studies although it may make people more aware of the monitored behaviour (Bolger et al. 2003). Despite these findings participants were informed that the study was not intended to influence their behaviour so as to limit any possibility of reactance during the study.

#### **6.6.4 Incentives to complete the study**

As suggested by Meadows and Stradling (1996, as cited in Haworth, 1996) all participants were invited to take part in a lottery in order to encourage people to take part and complete the entire study. Therefore, all participants were provided with a ticket at the beginning of the study which was the same as their unique code. Every participant who completed all parts of the study was included in the lottery. As the study was anonymous however the unique code on the lottery ticket was the only evidence of participation in the study. Therefore the winner had to present this ticket to receive their prize. Of course the winner was assured of confidentiality at all times.

#### **6.7 PILOT STUDY**

Several prototypes of the diary were produced before the final version was printed. Size, layout and cost all had to be considered. The final version was then piloted and the appropriate adjustments made.

The pilot study was administered to 8 participants from the population to be studied. Therefore, equal numbers of participants were chosen to take part from the health, education, retail and wholesale sector and each of the pairs in each sector held a managerial position while the other held a non-managerial position. Participants were an opportunity sample and were given the chance to enter in a draw for taking part in the study. The winner received £20 in cash.

The participants were asked to keep the diary for seven working days and were asked to make notes on any part of anger diary, questionnaires or instructions sheets that they were unclear about. After the seven days the researcher arranged to meet the participant and discuss any questions or queries that the participant had. The researcher kept a record of all the points that each participant had brought and the necessary alterations were made to the anger diary, questionnaires and instructions sheets. These were as follows:

1. Section A, item 2: "How long after the incident did you complete the questionnaire". Participants were not sure if the question referred to the beginning or end of the incident. Therefore, the researcher felt that this item

should be omitted and stipulated to participants that as long as the diary was filled in within 24 hours of the anger incident happening then this would still enable the participants to recall the incident clearly and accurately.

2. Section C, item 3: “You have been taught to do the job differently to the offender”. This item relates to the emergent theme of **New School vs. Old School** discovered in study one. The item only applied to offenders who were colleagues as opposed to customers, students or patients for instance. Therefore, in order to keep the responses to diary items flowing and so as not to cause confusion as to who should complete this item and who should not it was thought more suitable to omit this item all together.
3. In Section E, where participants were asked to complete 1 of 3 sections on expression, suppression or control of anger during the anger incident, some participants thought they needed to complete all 3 sections. Therefore, the instructions were reworded so as to make it clearer that only 1 section needed to be completed.
4. One of the participants suggested that I made it clearer on the Consent Form that it did not need signing, as doing so could easily identify participants.

## **6.8 DATA ANALYSIS**

The analysis of the data collected for this study was analysed in SPSS for Windows version 17.0. The statistics that were calculated for the study included using frequency distributions and a Logistic General Estimating Equation (GEE). The rationale for using such techniques is provided in the following results section.

Tables and barcharts presenting the number or percentage of occurrences for each of the items on the survey instrument used in the study were produced. This was done to illustrate the frequency in which the participants selected particular responses on the survey instruments. Those items with a higher frequency provide evidence that the participants perceived those factors to be an influence on anger at work.

Additionally, means were calculated for the computed total scores for each of the scaled scores and subscales scores measured by the JDI and JIG. A higher mean indicates that the participant has higher overall perceptions of that particular aspect of job satisfaction.

By calculating the means the distribution of the variables was also assessed. The distribution of the variables provide information on whether the data was normally distributed, as well as provided information regarding the overall trend in the responses of the participants of the study.

Subsequently, population-average GEE was conducted to determine the predictive ability of the independent variables on a dependent variable. The level of significance used in this study was the .05 level of significance, such that p-values less than .05 are considered to be significant. Due to missing data from the anger diary, twelve individuals were excluded from the analyses.

Section G, behaviour and feelings immediately after the anger incident but within 24 hours of it first occurring and section H, the Faces Scale which taps into the affective component of job satisfaction, of the anger diary were not used in the analysis as they were not the focus of the research at this time. However, future research could involve analysing the data in order to investigate further the short consequences of anger and the relationship of experiencing anger with affective component of job satisfaction.

### **6.8.1 Reliability and validity of ESM and diary items**

Several types of internal checks have shown that the method is remarkably veridical and discriminating (Hormuth, 1986; Samdahl, 1989 cited in Kubey et al. 1996) while the reliability and validity of the method has been well established for some time (Kubey & Csikszentmihalyi, 1990a; Larson & Csikszentmihalyi, 1983 cited in Kubey et al 1996). However, there has been much debate about the reliability and validity of items in diary studies. However, in anticipation of any dispute on the matter the following is offered.

#### ***Reliability***

The diary is looking at facts, actual behaviour and feelings as they are felt. Therefore, it would not be expected, especially in a diary study, that these behaviours and feelings

would be the same each time they are experienced, since each anger incident may be with a different offender and for a different reason, with a different outcome.

In addition, and by its nature, the event contingent methods of collecting data are not suitable for the usual methods of evaluating reliability. As Duck (1991) proposes “it is the case with diary studies that researchers who struggle to create a reliable measure are rigorously missing the point about the phenomenon that they seek to study (page 157)”. Indeed the very fact that an event contingent diary is being used suggests that the behaviour is not "reliable" in one of the traditional senses but something that pops up. Furthermore, Wheeler and Reis (1991) agree with this and propose that we can not obtain the interjudge reliability of the occurrence of an inner event and further state that test re-test reliability is problematical because stability or consistency would not be expected of the events of interest.

### *Validity*

With regards to the issue of validity, the question is whether the diary items validly tap personal experiences of anger incidents. The answer, Duck (1991) suggests, is probably yes. However, if the question is, do the items tap anger incidents, then that, Duck proposes is a different question. The argument has been put forward that data from the assessment of anger incidents, for example, are not simply based on ‘what happens’ but on what people experience as happening, and of course, one person’s experience may differ from another’s, even in the same situation or the same event (Duck, 1991). This is of course integral to the study, so again, to try and validate such items would in effect be contradictory to the aims of the study. Thus, with regard to the items, the aim is to be able to measure anger when it occurs using a valid criterion with reliable characteristics, but it is not assumed that the occurrence of anger will be reliably predictable in all cases (Duck, 2001).

Furthermore, in favour of one item questions within the anger diary, Wanous and Hudy (2001) report that acceptability of single item measures should be considered when situational constraints limit or prevent the use of scales and should not be considered a fatal flaw and state that “if the construct being measured is sufficiently narrow or is unambiguous to the respondent, a single item measure may suffice” (pg. 71).



None the less, despite Duck's argument on the matters of reliability and validity of such items, it is felt by the researcher that some form of testing of the validity of the diary should be carried out. Therefore, in order to examine the contents of the anger diary participants in the pilot study will be asked about their perception and understanding of the measures used to capture the causes, characteristics and consequences of anger incidents at work and as long as the researcher and the participants feel each question is coherent and simple then that is sufficient.

Furthermore, validity is based on what the participant perceives to be an angry incident therefore the researcher has only that anger to work with and can only hope that the participant is being truthful and accurate in their self report. As Wheeler and Reis (1991) state : "we go along trusting what subjects say...We are proceeding primarily on the faith based upon establishing a relationship conducive to honesty, that our co-investigators or collaborators know their reality at least as well as we do and are willing to disclose it" ( pg. 350)

One way to test this efficiently is to do a post-study questionnaire and ask participants how accurate they thought the diary was with regards to the number of anger incidents for example (Bolger et al., 2003; Corti, 1993; Tschan, Roschat & Zapf 2005). Therefore, questions about accuracy, omission in reporting and asking whether the diary keeping period was atypical of everyday life, will be included after the diary keeping period.

## **CHAPTER 7**

### **RESULTS AND DISCUSSION OF STUDY TWO: THE ANGER DIARIES**

#### **SECTION ONE**

#### **Frequency distributions for the anger diary items**

##### **7.1 OUTLINE OF THE CHAPTER**

The purpose of this section was to present the results for the survey data collected from the participants in the study. The results section was divided into two primary sections and over two chapters. The first section, chapter 7, is comprised of exploratory data analysis which includes frequency distributions for each of the responses collected for the anger diary items (The highlighted areas on the theoretical model illustrate which variables were being tested. See appendix 14). These responses are given by context, source and employment sector. In the second section, chapter 8, a Logistic Population Averaged GEE (Generalised Estimating Equation) with a Logit Link Function was used to test the distribution of the dichotomous dependent variables: expressions and suppression of anger. The model built looked at which attributes of an anger incident influenced expression of anger to offender.

##### **7.2 PRESENTATION OF RESULTS**

Where possible, results are presented in table form followed by an explanation of the findings. Tables presenting the number of occurrences for each of the items on the survey instrument were produced. Where cells counts are small only the actual counts will be used. However, when appropriate, percentages as well as frequencies will also be used to show the proportion of anger incidences.

The purpose of displaying the results in such a way is to allow the reader to ascertain what proportion or numbers of anger incidents are being experienced at work and how these incidents are similar or different for certain groups. Using statistical tests on the data at this point would not be appropriate because of the nature of the data. Such tests assume the data points are all independent. However the data points are not because some incidents are connected by the individual experiencing them. This will be

explained in greater detail in the next chapter. Table 8 below explains briefly why the author has chosen to look at each aspect and what will be gained from doing so.

Table 8: A table to show the outline and aims of the first section of the results

OUTLINE OF RESULTS SECTION	AIM
<u>Response rate</u>	To assess how successful the data collection was
<u>Demographics</u>	To see which groups were included in the analysis and which groups the data can be applied to
<u>End of Diary Questionnaire</u>	To evaluate the method used, particularly the accuracy of responses
<u>Influences of Anger</u> Distribution of anger incidents in which participants felt Stress, Mood, Accumulation and Inadequate Training prior to anger incident	To determine which of these four factors were being experienced prior to anger incidents
<u>Cause of Anger</u> Causes of Anger in relation to Context, Source and Employment Sector	To explore the causes of anger and see if these differ between groups
<u>Characteristics of Anger</u> Distribution of Number of Incidents, Duration of Incidents and Intensity of Incidents	To assess the frequency with which anger incidents are being experienced how long they are lasting, when they are experienced and how intense they are.
<u>Expression of Anger</u> By Context, Sector, Context and Sector together and Source	To explore if people are expressing anger in reaction to anger incidents and to investigate if there are differences between certain groups
<u>Expression and Behaviour</u> Look at the behaviour engaged in by Context, Source and Employment Sector	To explore how people are behaving when expressing anger and to further investigate if there is a difference between certain groups
<u>Motive for Expression</u>	To explore people's reasons for expressing anger
<u>Suppression of Anger with Context, Employment Sector, Context and Employment Sector together and Source with Context</u>	To explore if people are suppressing anger in reaction to anger incidents and to investigate if there is difference between certain groups
<u>Suppression and Behaviour</u> By Context, Source and Employment Sector	To explore how people are behaving when suppressing anger and to further investigate if there is a difference between certain groups
<u>Motives for Suppression</u>	To explore people's reasons for suppressing anger
<u>Control Anger</u> By Context, Employment Sector, Context and Employment Sector together, and Source with Context	To explore if people are controlling their anger in reaction to anger incidents and to investigate if there is difference between certain groups
<u>Faking Emotion</u> Hide anger from offender and others Expressing other emotion to offender and other using	To find out if people are performing emotional labour in response to angry incidents

### **7.3 RESPONSE RATE**

In total, 264 anger diaries were distributed to participants with 187 participating in the study. Due to missing data 12 participants were excluded from the study. All the data from the 187 participants was used, even if they did not experience any anger incidents over the four week diary keeping period. Of the 187 participants that responded 98 provided information regarding their anger diary, meaning that a total of 52.9% actually filled in at least one record on the anger diary and 47.1% returned their anger diary without any anger sheets completed. In total there were 268 anger incidents.

It is important for the reader to keep in mind that when going through the results section that it is anger incidents which are being described rather than people. Some people had more than one anger incident and so will appear more than once in the data and therefore in the exploratory analysis. For example, when interpreting the Cause of Anger and Relationship with Offender in table 7 it can be seen that 49 incidents occurred in reaction to Immoral Behaviour with 16 of those incidents happening with a Coworker. However, some of these 16 incidents may have been experienced by the same person. Therefore the exploratory work is only allowing the researcher and reader to get a feel for the data and the trends that it shows but will not take account of this issue. However, this issue will be dealt with in the second part of the analysis.

### **7.4 END OF DIARY QUESTIONNAIRE**

In order to assess the accuracy of participants' responses, participants were asked to complete the end of diary questionnaire. In total, 68 of the 187 individuals provided a response for the end of diary questionnaire survey instrument. This is a response rate overall of 36%. Nearly half of these participants (47.1%) believed that the anger incidents that they had experienced during the diary keeping period were typical of usual working life (item 1) and most (85.3%) believed the diary captured their experience of anger at work (item 5). Additionally, almost all of these participants (98.5%) believed they were very or fairly accurate at recording information about the anger incidents (item 2) and the vast majority of participants (89.7%) believed that they omitted very few if not 'none' of the incidents during the diary keeping period (item 3). Over 70% of the participants said that they tended to fill in the diary within 24 hours of the anger incident first occurring (item 7).

Around 85.3% of participants who completed the end of diary questionnaire said they did not find the diary difficult to complete, and for those that did find the diary difficult to complete, the lack of time available to complete the diary seemed to be the most common explanation offered (item 4 and 4a). Finally, almost all the individuals (89.7%) that completed the end of diary questionnaire felt that keeping a diary was a better method than a one-off questionnaire on anger at work (item 6) and the majority of comments of the diary study itself were positive.

## 7.5 FREQUENCY OF ANGER INCIDENTS

### 7.5.1 Distribution of number of anger incidents

The distribution of the number of anger incidents was explored in order to gather information on the number of anger incidents experienced by participants. This section deals with the question in section A of the anger diary and answers the following question:

*How often do people experience anger incidents at work?*

The majority of participants experience either zero (47.6%) or only one (19.8%) or two (14.4%) anger incidents over the four week anger diary period. Figure 2 is a bar chart showing the number of anger incidents reported by participants.

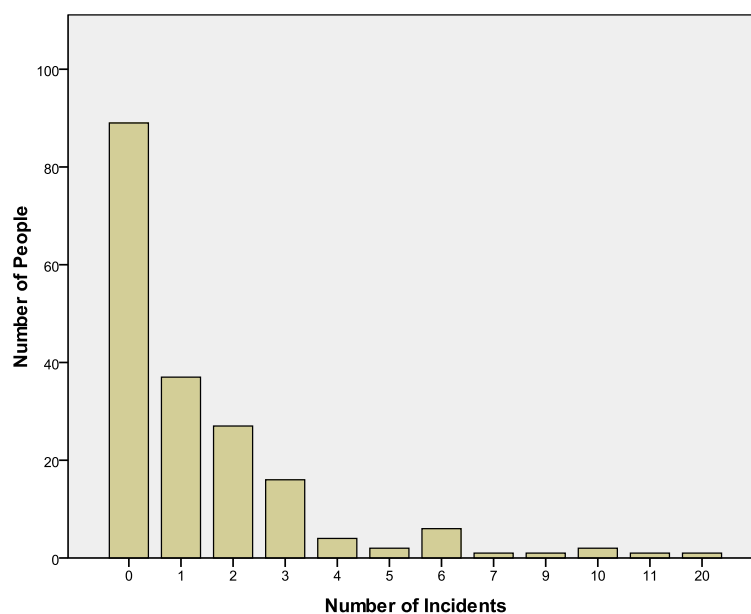


Figure 26: Bar chart showing the number of anger incidents reported by participants

## 7.6 OVERALL CAUSES OF ANGER

In order to examine the specific causes of anger participants were asked to indicate the main cause of their anger for each anger incident. This will answer the following question from section B of the anger diary:

*Overall, what are the causes of anger at work?*

Figure 27 below indicates the number of incidents attributed to each of the listed causes. Participants were asked to only choose one cause for each incident.

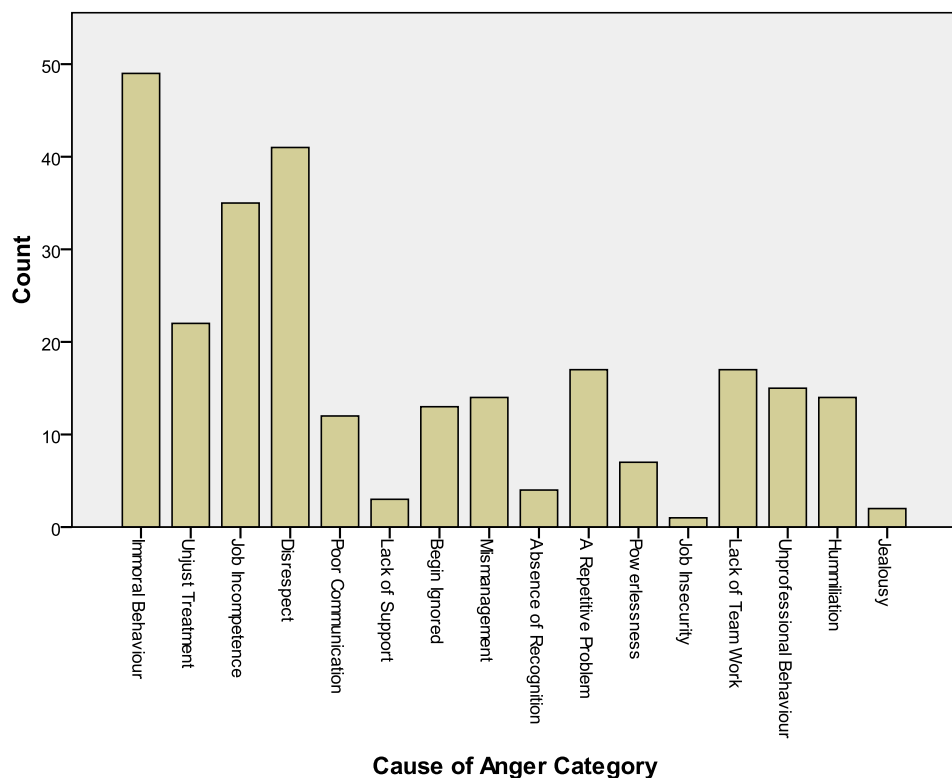


Figure 27: Causes of anger

The most frequent response was for the category of immoral behaviour (18.5%) with participants most commonly choosing response *a* they were lazy, *m* they rang in sick and you suspected they were lying, *c* they were constantly moaning and *j* they were misbehaving. This was followed by the category of job incompetence (13.3%), where most responses were for *c* the offender didn't do their job properly. Disrespect (15.4%) was the next most frequent category chosen and participants tended to choose response option *d* they were rude to you. Within the category of unjust treatment (8.3%) participants most frequent response was *d* you were unjustly criticised. As for the other cause of anger, there were a total of 18 responses. Each participant had a different

response regarding the other cause of anger. However, the researcher chose to refer these causes to a suitable category from the existing list.

### 7.6.1 Cause of anger and context of anger incident

The relationship between the victim and offender was explored. This was to gather information on the distribution of incidents, which happened with different offenders, to see if certain types of incidents are occurring to create anger and further investigate what those particular incidents were. This will answer the following question from section B of the anger diary:

*Do the causes of anger vary depending on who the offender of the anger incident is?*

The cause of anger and context are presented in table 9. The exploratory data shows that coworkers followed by supervisors and subordinates are the most common offenders.

Table 9: Cause of anger and relationship with offender

		RELATIONSHIP WITH OFFENDER							TOTAL
		Superior Manager Supervisor	Coworker	Subordinate	Customer Client Supplier	Patient	Student Pupil	Other	
Cause of Anger Category	Immoral Behaviour	5	18	10	0	4	10	2	49
	Unjust Treatment	12	6	2	2	0	0	0	22
	Job Incompetence	7	15	7	3	0	3	0	35
	Disrespect	4	6	2	9	7	12	1	41
	Poor Communication	5	4	1	1	0	0	1	12
	Lack of Support	0	3	0	0	0	0	0	3
	Being Ignored	2	6	4	0	0	0	1	13
	Mismanagement	10	2	0	1	0	0	1	14
	Absence of Recognition	4	0	0	0	0	0	0	4
	A Repetitive Problem	4	6	1	3	2	0	1	17
	Powerlessness	2	2	0	0	1	2	0	7
	Job Insecurity	0	0	0	0	0	0	1	1
	Lack of Team Work	2	8	7	0	0	0	0	17
	Unprofessional Behaviour	2	3	9	0	0	1	0	15
	Humiliation	6	4	1	2	0	0	1	14
Jealousy	0	2	0	0	0	0	0	2	
Total		65	85	44	21	14	28	9	266

Furthermore, for coworkers the most common cause of anger is immoral behaviour, with participants most commonly choosing response *a* they were lazy and job incompetence, with participants mainly choosing response *c* the offender didn't do their job properly. For superiors participants mainly chose unjust treatment, with participants mainly choosing response *d* you were unjustly criticised and response *f* you were given a heavy workload. For subordinates it is immoral behaviour and for customers, patients and students the most common cause of anger is disrespect, with participants mainly choosing response *b* they were arrogant to you and response *d* they were rude to you.

### 7.6.2 Cause of anger and source of incident

The source of the anger incident was also explored. This was to gather information on the distribution of incidents happening internally (i.e. between the angry person and superiors, managers, supervisor, coworkers and subordinates) and externally (i.e. between the angry person and customers, clients, suppliers, patients, students, and pupils) to explore the settings where certain incidents were occurring to create anger and to further investigate what those particular incidents were. This will address the following question section B of the anger diary:

*Do the causes of anger vary depending on who the source of the anger incident is?*

Table 10: Cause of anger and source of anger Incident

		SOURCE		TOTAL
		External	Internal	
Cause of Anger Category	Immoral Behaviour	14	33	47
	Unjust Treatment	2	20	22
	Job Incompetence	6	29	35
	Disrespect	27	12	39
	Poor Communication	1	10	11
	Lack of Support	0	3	3
	Begin Ignored	0	12	12
	Mismanagement	1	12	13
	Absence of Recognition	0	4	4
	A Repetitive Problem	5	11	16
	Powerlessness	3	4	7
	Lack of Team Work	0	17	17
	Unprofessional Behaviour	1	14	15
	Humiliation	2	11	13
	Jealousy	0	2	2
Total (n) %		62 (24.2)	194 (75.8)	256



Overall table 10 shows that anger incidents tend to be caused by an anger incident which took place internally (75.8%) as opposed to externally (24.2%).

### *Causes of anger by an external source*

Disrespect is the one cause where there was a greater tendency to be caused by an external source, in particular within this category, offenders being rude and arrogant to the participant, using foul language and being noisy were the most common causes of anger. However, lack of support, being ignored, absence of recognition, lack of teamwork and jealousy did not appear in the output for cause of anger and external sources. This may be expected with such categories as they seem to be relevant to anger incidents which take place between work colleagues as opposed to external offenders such as a customer, patient or student.

### *Causes of anger by an internal source*

Internally, immoral behaviour, with participants most commonly choosing response *a* They were lazy; job incompetence, with participants most commonly choosing response *c* the offender didn't do their job properly; unjust treatment and lack of team work were the most common reasons for causes of anger incidents.

### **7.6.3 Cause of anger and employment sector**

The employment sector within which the anger incident took place was also explored. This was to gather information on the distribution of incidents which happened within each sector (i.e. retail, wholesale, education and health), to explore the sectors where certain incidents are occurring to create anger and to further investigate what those particular incidents are. Hence it will answer the following question from section B of the anger diary:

*Do the causes of anger vary depending on which employment sector the anger incident takes place in?*

Table 11 below shows the causes of anger by employment sector. In the retail sector job incompetence, followed by unjust treatment, disrespect and immoral behaviour were the most common causes of anger and in the wholesale sector it was immoral behaviour

In the education sector, disrespect, immoral behaviour and unprofessional behaviour were the most common causes of anger. Finally, in the health sector immoral behaviour; job incompetence, particularly the offender not doing their job properly; disrespect; humiliation, particularly being belittled by the offender; unjust treatment and lack of team work were the most common reasons given for participants' causes of anger.

Table 11: The causes of anger by employment sector

Cause of Anger Category		ORGANISATIONAL SECTOR				TOTAL
		Retail	Wholesale	Education	Health	
	Immoral Behaviour	6	15	16	12	49
	Unjust Treatment	8	2	4	8	22
	Job Incompetence	9	6	8	12	35
	Disrespect	8	5	17	11	41
	Poor Communication	1	4	5	2	12
	Lack of Support	2	0	0	1	3
	Begin Ignored	3	4	5	1	13
	Mismanagement	3	4	3	4	14
	Absence of Recognition	1	0	1	2	4
	A Repetitive Problem	5	5	1	6	17
	Powerlessness	1	0	2	4	7
	Job Insecurity	0	0	0	1	1
	Lack of Team Work	1	4	4	8	17
	Unprofessional Behaviour	1	2	10	2	15
	Humiliation	4	1	0	9	14
	Jealousy	1	0	0	1	2
Total		54	52	76	84	266

## 7.7 INFLUENCES OF ANGER

In order to investigate whether there were other factors which could contribute to anger incidents occurring in the first place angry persons were asked to indicate whether they believed stress, being in a bad mood, accumulation of anger and feeling inadequately trained to deal with the situation attributed them feeling angry. This will deal with following question from section C of the anger diary:

*What is the frequency with which angry persons believe that stress, mood, accumulation and inadequate training are influencing the occurrence of anger incidents?*

The box plots below illustrate the distribution of the four factors that may have had an influence on the anger incidents happening in the first place: stress, mood, accumulation of anger and lack of training. All the factors are measured on a 9 point scale with 1 = strong agreement and 9 = strong disagreement. However, the scale was recoded for easier interpretation so that 1 = strong disagreement and 9 = strong agreement.

### 7.7.1 Stress

Figure 28 below shows that the median for being already stressed before an incident lies around point 3 on the scale. The boxplot also shows that in half of incidents participants disagree with being stressed prior to an incident, but in around a quarter of incidents, participants at least agree to some extent with the statement ‘you were already stressed’.

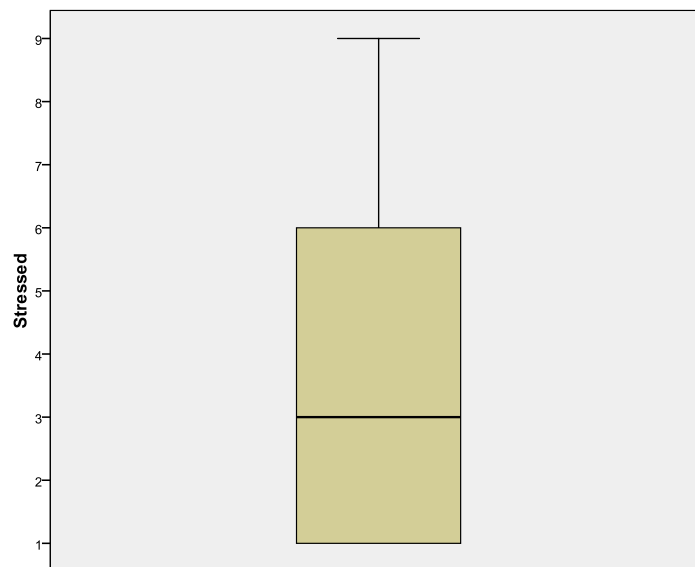


Figure 28: A box plot to show the distribution of anger incidents in which participants believed that they were already stressed before the anger incident

### 7.7.2 Mood

Figure 29 below shows that the median for already being in a bad mood before an incident lies around point 2 on the scale. The box plot also shows that in the majority of incidents participants show that they are undecided or that they strongly disagree with the statement ‘ You were already in a bad mood’ .

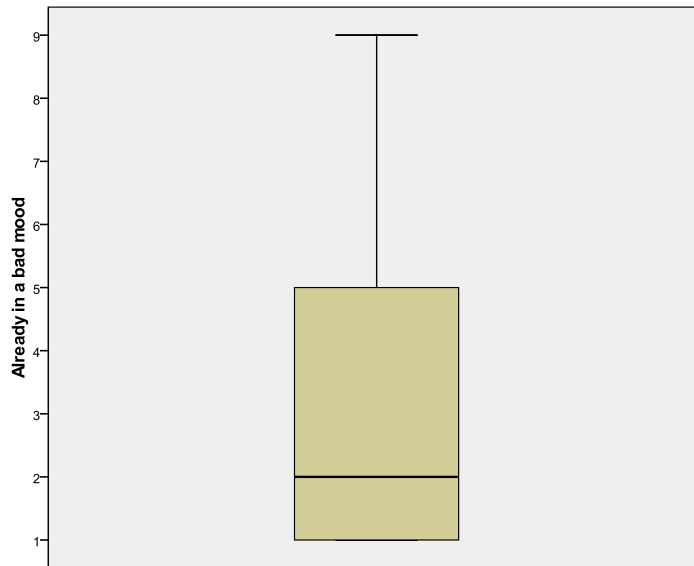


Figure 29: A boxplot to show the distribution of anger incidents in which participants felt they were already in a bad mood

### 7.7.3 Accumulation

Figure 30, shows that the median for accumulation of anger is 2 on the scale. The box plot shows that in the majority of anger incidents participants are undecided or strongly disagree with the statement that ‘you had let your anger build up and this was the incident that finally made you snap’.

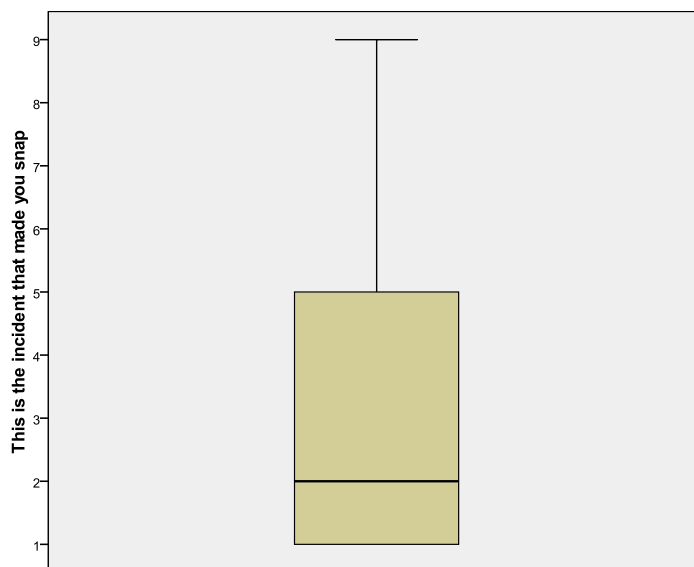


Figure 30: A boxplot to show the distribution of anger incidents in which participants believed that they had let their anger build up and this was the incident that finally made them snap

### 7.7.4 Inadequate Training

Figure 31 below shows that the median for feeling inadequately trained to deal with such situations before an incident lies at point 2 on the scale. The box plot also shows that in the vast majority of incidents participants disagree with the statement ‘you felt inadequately trained to deal with such situations’. Although it would seem that the majority of participants felt inadequate training did not have anything to do with their anger, the outliers illustrate that there could be some participants who particularly felt unequipped to deal with certain situations at work which they believed led to their anger. Although there are only four outliers larger studies may show that this could be a contributable influence to employees becoming angry.

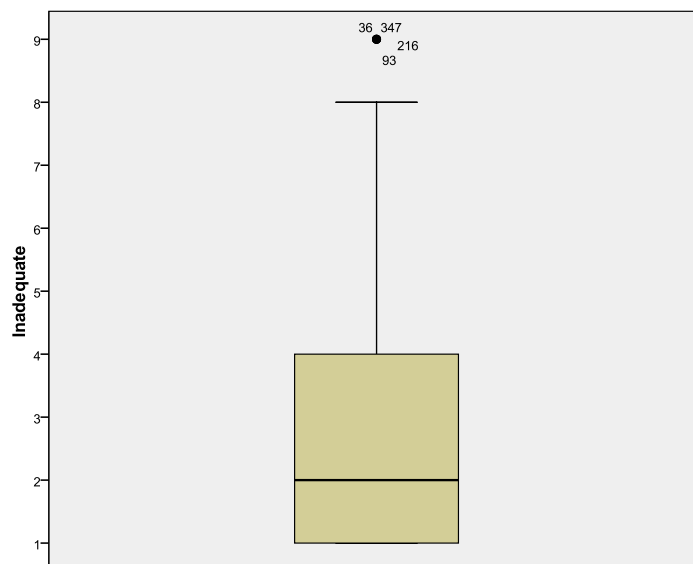


Figure 31: A boxplot to show the distribution of anger incidents in which the participants felt that they were inadequately trained to deal with such situations

### 7.8 DURATION AND INTENSITY OF ANGER INCIDENT

The next set of variables examines the intensity and duration of anger incidents. The following question relates to section D in the anger diary.

*How long does the angry person's anger last when they become angry?*

### 7.8.1 Distribution of duration of anger incidents

In order to explore how long participants' anger lasted, the distribution of the length of time spent angry was also explored. Figure 32 shows the distribution of duration of anger incidents. The most frequent length of time spent angry was 5 to 10 minutes (21.1%). However, the bar chart also shows that a large percentage of anger incidents did last longer than 5 to 10 minutes, including 13.9% of anger incidents which lasted half a day and 9.0% which lasted one day or more.

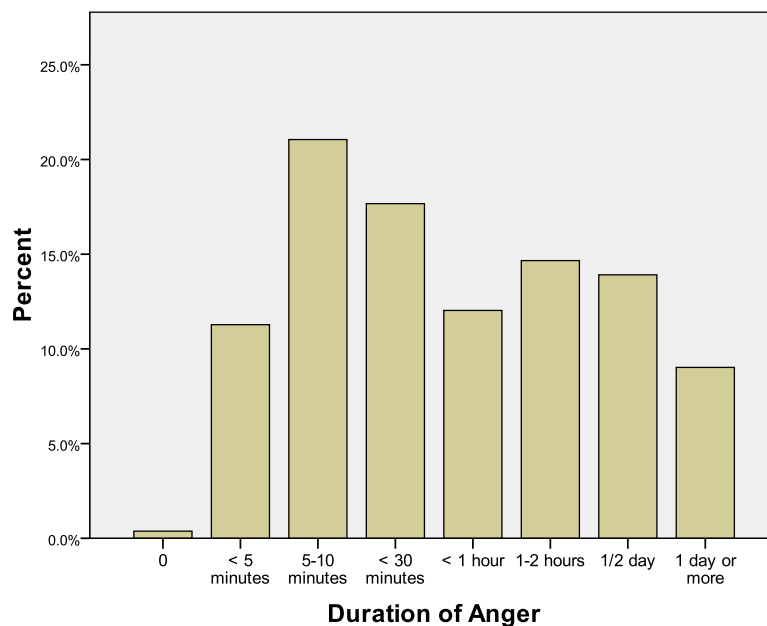


Figure 32: Bar chart showing the duration of incidents reported by participants.

### 7.8.2 Distribution of intensity

In order to explore the intensity of participants' anger the distribution of participants' anger intensity was investigated. This section deals with section D of the anger diary:

*How intense is the angry person's anger when they do become angry?*

Figure 33 shows that the majority of anger incidents were moderate to intense.

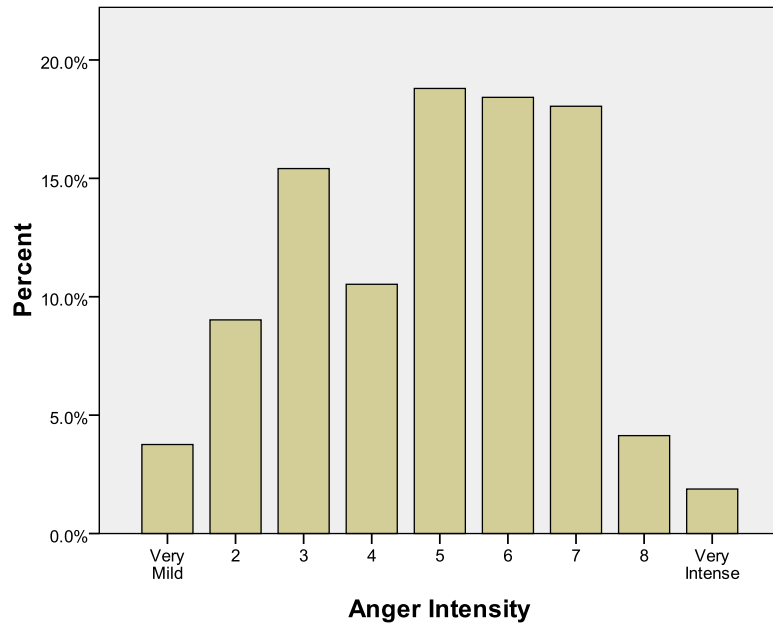


Figure 33: Bar chart showing the intensity of anger incidents

## 7.9 EXPRESSION, SUPPRESSION AND CONTROL OF ANGER

The researcher wished to examine how participants reacted to anger incidents and to see if they expressed, suppressed or controlled their anger. The following section looks at the distribution of anger incidents in which the participant expressed, suppressed and controlled their anger and looks at this further by comparing the distribution of anger expression, suppression and control, by context, sector, and context and sector together and finally by source. It then looks at the ways in which the individuals behave when expressing or suppressing their anger and looks at this in relation to context, source and sector

Out of the total number of anger incidents, 112 involved the expression of anger, 131 involved the suppression of anger and 25 involved the control of anger

### 7.9.1 Context and expression, suppression and control of anger

As with the causes of anger, the researcher also wanted to investigate whether the context of the anger incident influenced whether the angry person expressed, suppressed

or controlled their anger. This will answer the following question in section E of the anger diary:

*Does the context alone (i.e. the relationship with the offender) have an effect on whether the angry person expresses, suppresses or controls their anger?*

Table 12 shows the expression, suppression and control of anger by contexts.

Table 12: The expression, suppression and control of anger by context

EXPRESSION SUPPRESSION CONTROL TO OFFENDER		SUPERIOR MANAGER SUPERVISOR	COWORKER	SUBORDINATE	CUSTOMER CLIENT SUPPLIER	PATIENT	STUDENT PUPIL	OTHER	TOTAL
<b>Expression</b>	Count	24	32	20	6	7	18	5	112
	%	21.4	28.6	17.9	5.4	6.3	16.1	4.5	100
<b>Suppression</b>	Count	38	45	22	10	6	6	4	131
	%	29.0	34.4	16.8	7.6	4.6	4.6	3.1	100
<b>Control</b>	Count	3	8	2	5	1	5	1	25
	%	12.0	32.0	8.0	20.0	4.0	20.0	4.0	100

### 7.9.1 Employment sector and expression, suppression and control

In order to explore if victims behaviour differed depending on the employment sector they worked in, the distribution of expression, suppression and control of anger was examined. This will answer the following question in section E of the anger diary:

*Does the employment sector that the angry person works in have an effect on whether they express, suppress or control their anger?*

Table 13 below shows the expression, suppression and control of anger by sector.

Table 13: Expression, suppression control of anger by sector

EXPRESSION SUPPRESSION CONTROL TO OFFENDER		RETAIL	WHOLESALE	EDUCATION	HEALTH	TOTAL
<b>Expression</b>	Count	24	28	33	27	112
	%	21.4	25.0	29.5	24.1	100
<b>Suppression</b>	Count	24	19	35	53	131
	%	18.3	14.5	26.7	40.5	100
<b>Control</b>	Count	5	5	11	4	25
	%	20.0	20.0	44.0	16.0	100



## 7.9.2 Expression, suppression and control of anger by sector and context

In order to examine whether the angry persons' reaction to anger differed depending on the employment sector they worked in and the relationship that they had with the offender, the distribution of the expression, suppression and control of anger was examined. This will answer the following question from section E of the anger diary :

*Does the context (i.e. the relationship that the angry person has with offender) and the employment sector together, have an effect on whether the angry person expresses, suppresses or controls their anger?*

Table 14 shows the counts and percentages of anger incidents which involved expression, suppression and control of anger by context and sector.

Table 14: Expression, suppression and control of anger by context and sector

			EXPRESS, SUPPRESS OR CONTROL OF ANGER TO OFFENDER BY CONTEXT AND SECTOR						Total
			Relationship with Offender						
Employment Sector	Express Suppress Control To Offender	Superior Manager Supervisor	Coworker	Subordinate	Customer Client Supplier	Patient	Student Pupil	Other	
Retail	Expression	29.2% ( 7 )	37.5% (9)	16.7% (4)	12.5% (3)	0% (0)	0% (0)	4.2% (1)	100% (24)
	Suppression	37.5% (9)	29.2% (7)	8.3% (2)	25.0% (6)	0% (0)	0% (0)	0% (0)	100% (24)
	Control	0% (0)	25.0% (1)	0% (0)	75.0% (4)	0% (0)	0% (0)	0% (0)	100% (5)
Wholesale	Expression	21.4% (6)	46.4% (13)	25.0% (7)	7.1% (2)	0% (0)	0% (0)	0% (0)	100% (28)
	Suppression	15.8% (3)	63.2% (12)	10.5% (2)	5.3% (1)	0% (0)	0% (0)	5.3% (1)	100% (19)
	Control	40.0% (2)	40.0% (2)	0% (0)	20.0% (1)	0% (0)	0% (0)	0% (0)	100% (5)
Education	Expression	15.2% (5)	15.2% (5)	12.1% (4)	3.0% (1)	0% (0)	48.5% (16)	6.1% (2)	100% (33)
	Suppression	25.7 (9)	20.0% (7)	31.4% (11)	5.7% (2)	0% (0)	11.4% (4)	5.7% (2)	100% (35)
	Control	9.1% (1)	18.2% (2)	18.2% (2)	0% (0)	0% (0)	45% (5)	9.1% (1)	100% (11)
Health	Expression	22.2% (6)	18.5% (5)	18.5% (5)	0% (0)	25.9% (7)	7.4% (2)	7.4% (2)	100% (27)
	Suppression	32.1% (17)	35.8% (19)	13.2% (7)	1.9% (1)	11.3% (6)	3.8% (2)	1.9% (1)	100% (53)
	Control	0% (0)	75% (3)	0% (0)	0% (0)	25% (1)	0% (0)	0% (0)	100% (4)

### ***Retail***

In this sector closer inspection of the table 14 shows that most incidents involve expression of anger to a coworker followed by a superior, manager or supervisor. There are only a few incidents which involve expression of anger to a subordinate or customer, client or supplier. Most incidents involve suppression of anger to a superior, manager or supervisor followed by a coworker and customers, client or supplier. There are only a few suppressions of anger to a subordinate. Of the 5 incidents that took place in the retail sector and involved control of anger, 1 took place with a coworker and 4 took place with a customer.

### ***Wholesale***

In this sector the table shows that majority of expressions of anger are to a coworker and there are only a few incidents which involve expression to a customer, client or supplier. The majority of suppressions of anger were with a coworker. Only one incident involved suppression from a customer, client or supplier. Of the 5 incidents that took place in the wholesale sector and involved control of anger 2 took place with a supervisor, 2 with a coworker and 1 with a customer.

### ***Education***

Within the education sector the table shows that a large proportion of incidents involved expression to a student or pupil. In addition the table shows that there was a fairly equal amount of expression between colleagues at all levels although the figures are fairly small. Most incidents involve suppression of anger from subordinates, followed by superiors, managers and supervisors and coworkers. Few incidents involve suppression from students or pupils. Of the 11 incidents that took place in the education sector and involved the control of anger, 1 took place with a supervisor, 2 with a coworker, 2 with a subordinate, 5 with a pupil or student and 1 with other.

### ***Health***

In the health sector, the largest amount of expression was to patients. However there are a similar and fairly equal number of incidents which involve expression between

colleagues at all levels. Once again though, these figures are fairly small. In the health sector, the largest amount of suppression was to a coworker followed by a superior, manager or supervisor. There are only a few incidents involving suppression of anger to patients. Of the 4 incidents that took place in the health sector and involved control of anger, 3 took place with a coworker and 1 with a patient.

### **7.9.3 Expression, suppression and control of anger by source**

In order to examine whether the angry persons' reaction to anger differed depending on the source of the anger, the distribution of the expression, suppression and control of anger was examined. This will answer the following question from section E of the anger diary:

*Does the source of the anger incident alone have an effect on whether the angry person expresses, suppresses or controls their anger?*

#### ***Expression of anger and source***

Overall, <sup>3</sup>107 anger incidents involved expression of anger with the majority of anger incidents taking place internally (71.0%) and the remaining incidents taking place externally (29.0%).

#### ***Suppression of anger and source***

Overall, <sup>4</sup>126 anger incidents involved suppression of anger with the majority of anger incidents taking place internally (82.7%) and a few taking place externally (17.3%).

#### ***Control of anger and source***

Overall, <sup>5</sup>23 anger incidents that involved control of anger with 13 anger incidents taking place internally and 10 anger incidents taking place externally.

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<sup>3</sup> Five incidents were with 'other' and the source of the anger incident was unspecified. Therefore, the figure used is 107 instead of 112, which is the total number of incidents that involved expression.

<sup>4</sup> Five incidents were with other and the source of the anger incident was unspecified. Therefore, the figure used is 126 instead of 131, which is the total number of incidents that involved suppression.

#### 7.9.4 Expression, suppression and control of anger by source and context

The source of the anger and context of the incident was also explored. This was to gather information on the distribution of incidents in which victims expressed, suppressed or controlled their anger and if this happened internally (i.e. between the victim and superiors, managers, supervisor, coworkers and subordinates) or externally (i.e. between the victim and customers, clients, suppliers, patients, students and pupils) and if the relationship that the victim had with offender affected whether they expressed, suppressed or controlled their anger within each of the internal or external settings. This will address the following question from section E of the anger diary:

*Does the source of the anger incident and the relationship with the offender together, have an effect on whether the angry person expresses, suppresses or controls their anger?*

Table 15 below shows the distribution of anger incidents which took place internally and shows whether the victim expressed, suppressed or controlled their anger in such circumstances.

Table 15: Expression, suppression and control of anger to an internal source by context

	<b>SUPERIOR MANAGER SUPERVISOR</b>	<b>COWORKER</b>	<b>SUBORDINATE</b>	<b>TOTAL</b>
<b>EXPRESSION</b>	24	32	20	76
	31.6%	42.1%	26.3%	100%
<b>SUPPRESSION</b>	38	45	22	105
	36.2%	42.9%	20.9	100%
<b>CONTROL</b>	3	8	2	13
	23.1%	61.5%	15.5%	100%

Table 16 below shows the distribution of anger incidents which took place externally and shows whether the victim expressed, suppressed or controlled their anger in such circumstances.

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<sup>5</sup> This is the figure for the anger incidents which occurred for control of anger without the 2 unspecified 'other' incidents.

Table 16: Expression, suppression and control of anger to an external source

	CUSTOMER CLIENT SUPPLIER	PATIENT	STUDENT PUPIL	TOTAL
<b>EXPRESSION</b>	6	7	18	31
	19.4%	22.6%	58.1%	100%
<b>SUPPRESSION</b>	10	6	6	22
	45.5%	27.3%	27.3%	100%
<b>CONTROL</b>	4	1	5	10
	40.0%	10.0%	50.0%	100%

## 7.10 EXPRESSION AND SUPPRESSION OF ANGER BEHAVIOURS

The aim of the section was to try and find out what behaviours people engage in when they do express or suppress their anger. To explore this even further, how the victims behaved when they expressed or suppressed their anger will be explored by context, source and employment sector separately. This will hopefully address the following question from section E of the anger diary:

*What behaviours do the angry persons engage in when expressing or suppressing their anger and do the context (i.e. the relationships with the offender), the source of the incident and employment sector that the angry persons work in have an effect on this behaviour?*

The behaviours for expression of anger are shown as verbal abusive, verbal non-abusive, body language and physical aggression. Verbal abusive relates to speaking in an angry tone to the offender, shouting at the offender, using insults and using offensive language. Verbal non-abusive relates to talking calmly to the offender about the incident. The participant using their body language relates to the participant storming out of the office and turning their back on the offender whereas physical aggression relates to the participant causing physical harm to the offender or using physical aggression towards an inanimate object.

The behaviours for suppression of anger are shown as stay quiet and walk away. Stay quiet relates to the behaviour in which victims just stayed quiet and got on with their work and walk away relates to the behaviour in which victims walked away from the offender.

It is important to highlight that with regards to the ways in which participants can express their anger (e.g. ‘angry tone’, ‘shout at offender’) or suppress their anger (e.g. ‘walk away, ‘get on with their work’) that they can state more than one action within the anger diary. Therefore, the reader needs to take this into account for this section of the results, and be aware that each action can not be treated as mutually exclusive.

### 7.10.1 Expression of anger, behaviour and context (i.e. relationship with offender)

Table 17 below shows the expressive behaviours which participants engaged in, in relation to the offender.

Table 17: How the individual behaves when expressing anger in relation to context

BEHAVIOUR	SUPERIOR MANAGER SUPERVISOR	COWORKER	SUBORDINATE	CUSTOMER CLIENT SUPPLIER	PATIENT	STUDENT PUPIL	OTHER	TOTAL
<b>Verbal Abusive</b>	20	33	10	6	4	23	10	<b>106</b>
<b>Verbal Non Abusive</b>	12	14	14	3	7	12	0	<b>62</b>
<b>Body Language</b>	22	11	7	0	2	5	0	<b>47</b>
<b>Phy. Aggression</b>	2	5	0	0	1	0	0	<b>8</b>
<b>Total</b>	<b>56</b>	<b>96</b>	<b>31</b>	<b>9</b>	<b>14</b>	<b>40</b>	<b>10</b>	

The table shows that all forms of expression were more likely to occur between co-workers than between any other group (96). Also, verbal abusive behaviour had quite a large skew towards coworkers with 31% (33 out of 106) of the incidents that involved expression using verbal abusive behaviour when being provoked by a coworker.

In addition, further examination of the table shows that with regard to body language nearly half of incidents were likely to occur when angered by a superior, manager or supervisor.

However, externally, all forms of expression were more likely to occur when the person was angered by a student or pupil compared to any other group externally. Again verbal abusive behaviours were the expressive behaviours that participants were more likely to engage in within this group.

### 7.10.2 Suppression, behaviour and context (i.e. relationship with offender)

Table 18 shows that all forms of suppression were much more likely to occur with a coworker followed by a supervisor, manager and coworker than with any other offender. Also, ‘stay quiet’ had an especially big skew towards the coworker with 37.7% (43 out of 114) of the incidents that involved suppression using ‘stay quiet’ when being angered by a coworker.

Table 18: How the individual behaved when suppressing anger in relation to context

BEHAVIOUR	SUPERIOR MANAGER SUPERVISOR	COWORKER	SUBORDINATE	CUSTOMER CLIENT SUPPLIER	PATIENT	STUDENT PUPIL	OTHER	TOTAL
<b>Stay Quiet</b>	33	43	17	8	5	4	4	<b>114</b>
<b>Walk Away</b>	21	27	11	5	2	2	1	<b>69</b>
<b>Total</b>	<b>54</b>	<b>70</b>	<b>28</b>	<b>13</b>	<b>7</b>	<b>6</b>	<b>5</b>	

### 7.10.3 Expression of anger, behaviour and source

Table 19 below shows that all forms of expression were much more likely to occur in internal settings than external settings. Body language had an especially big skew towards the internal setting with 85.1% (40 out of 47) of the incidents that involved expression using Body language being angered by an internal person.

There were very few incidents that were reported as involving physical aggression (8) thus there is very little evidence to go on regarding this form of expression.

Table 19: How the individual behaved when expressing anger in relation to source

	EXTERNAL	INTERNAL	TOTAL
<b>Behaviour</b>			
<b>Verbal Abusive</b>	33	63	<b>96</b>
<b>Verbal Non Abusive</b>	22	40	<b>62</b>
<b>Body Language</b>	7	40	<b>47</b>
<b>Physical Aggression</b>	1	7	<b>8</b>
<b>Total</b>	<b>63</b>	<b>150</b>	

#### 7.10.4 Suppression of anger, behaviour and source

Table 20 shows that all forms of behaviour were much more likely to occur in the internal anger incident setting than the external anger incident setting. Both stay quiet and walk away had an especially big skew towards the internal setting with 84.5% (93 out of 110) and 86.7% (59 out of 68) of incidents that involved suppression using stay quiet and walk away behaviours when being provoked by an internal person.

Table 20: How the individual behaved when suppressing anger in relation to source

	EXTERNAL	INTERNAL	TOTAL
<b>Behaviour</b>			
<b>Stay Quiet</b>	17	93	<b>110</b>
<b>Walk Away</b>	9	59	<b>68</b>
<b>Total</b>	<b>26</b>	<b>152</b>	

#### 7.10.5 Expression of anger, behaviour and employment sector

As table 21 shows below all forms of expression were much more likely to occur in the Education Sector. However, the numbers of incidents which involve expression and in which participants engaged in expressive behaviour are quite similar across all other sectors.

When examining the table more closely it can be seen that figures for verbal abusive behaviour are particularly high in the education sector, and also the wholesale and education sectors compared to the health sector. Also, verbal non abusive is comparably low in the retail and wholesale sectors compared to the education and health sectors.



Table 21: How the individual behaved when expressing anger in relation to employment sector

	RETAIL	WHOLESALE	EDUCATION	HEALTH	TOTAL
<b>Behaviour</b>					
<b>Verbal Abusive</b>	28	28	35	15	106
<b>Verbal Non Abusive</b>	8	12	21	21	62
<b>Body Language</b>	11	13	9	14	47
<b>Physical Aggression</b>	5	1	1	1	8
<b>Total</b>	<b>52</b>	<b>54</b>	<b>66</b>	<b>51</b>	

### 7.10.6 Suppression of anger, behaviour and sector

As table 22 shows below all forms of suppression were much more likely to occur in the Health sector.

When examining the table more closely it can be seen that figures for both stay quiet (41.2%) and walk away (47.8%) behaviours are particularly high in the health sector compared to the other sectors.

Table 22: How the individual behaved when suppressing anger in relation to employment sector

	RETAIL	WHOLESALE	EDUCATION	HEALTH	TOTAL
<b>Behaviour</b>					
<b>Stay Quiet</b>	21	17	29	47	114
<b>Walk Away</b>	8	11	17	33	69
<b>Total</b>	<b>29</b>	<b>28</b>	<b>46</b>	<b>80</b>	

### 7.11 MOTIVES FOR EXPRESSION AND SUPPRESSION OF ANGER

This section relates to the reasons angry person gave for expressing or suppressing their anger and relates to the following question in the anger diary in section E of the diary:

*Why do angry persons express or suppress their anger?*

First the results of motives for expression of anger are presented followed by motives for suppression of anger.

### 7.11.1 Motives for expression of anger

Three items in the anger diary were used to assess motives for expression. The results are shown in the form of bar charts and illustrate the number of anger incidents for which participants agreed or disagreed on a nine point scale to one of three statements.

#### *Statement 1: 'You wanted to intimidate your offender'*

Figure 34 below shows that there is general disagreement with the statement you wanted to intimidate the offender; however, the bar chart also shows that in some incidents participants do agree with the statement to some extent.

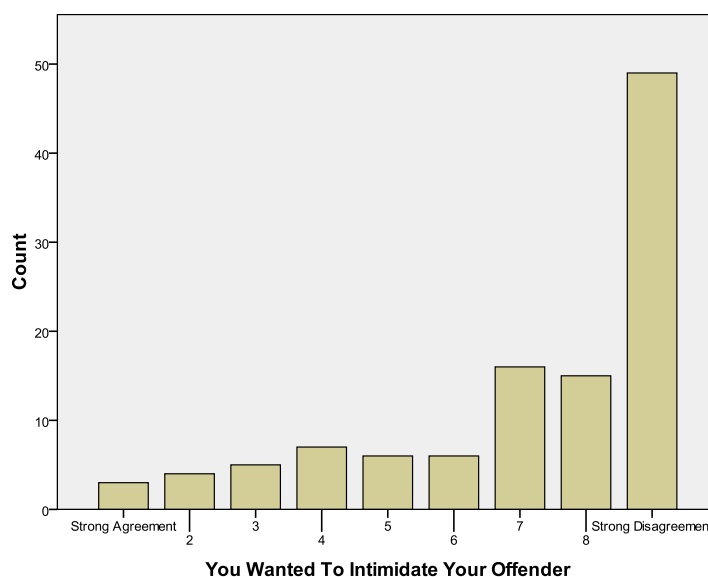


Figure 34: Bar chart to show the number of anger incidents in which participants' motives for expressing anger were because they wanted to intimidate the offender

#### *Statement 2: 'You just couldn't contain your anger anymore'*

Figure 35 below shows that for this motive there is a certain number of incidents where participants agree with the statement you just couldn't contain your anger anymore, a certain number of incidents where participants are possibly undecided and a number of incidents where participants disagree with the statement.

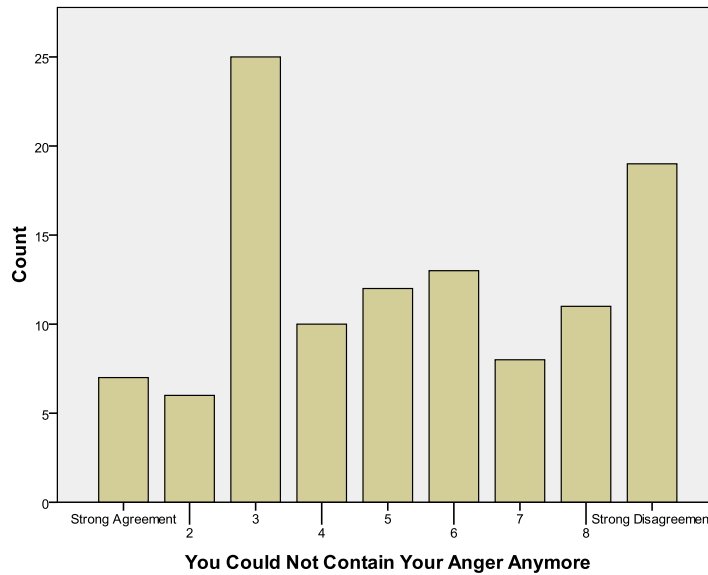


Figure 35: Bar chart to show the number of anger incidents in which participants' motive for expressing anger was that they could not contain their anger anymore

***Statement 3: 'You wanted the offender to know what they had done'***

For this final statement, figure 36 shows that there is general agreement with this statement and that in most incidents participants expressed their anger to the offender because they wanted to let the offender know what they had done to make them angry.

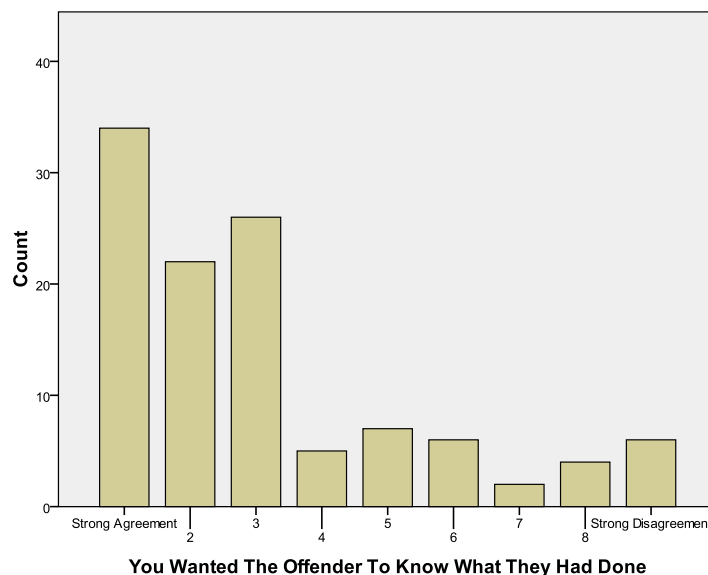


Figure 36: Bar chart to show the number of anger incidents in which participants' motive for expressing anger was that they wanted to let the offender know what they had done

### 7.11.2 Motives for suppression of anger

This next section relates to the reasons participants gave for suppressing their anger. Three items in the anger diary were used to assess motives for suppression. The results are shown in the form of bar charts and illustrate the number of anger incidents for which participants agreed or disagreed on a nine point scale to a certain statement.

#### *Statement 1: 'Expressing your anger is just not the right thing to do'*

Figure 37 below shows that there is general agreement with the statement 'expressing your anger is just not the right thing to do at work'; however, in some instances participants do disagree with the statement to some extent.

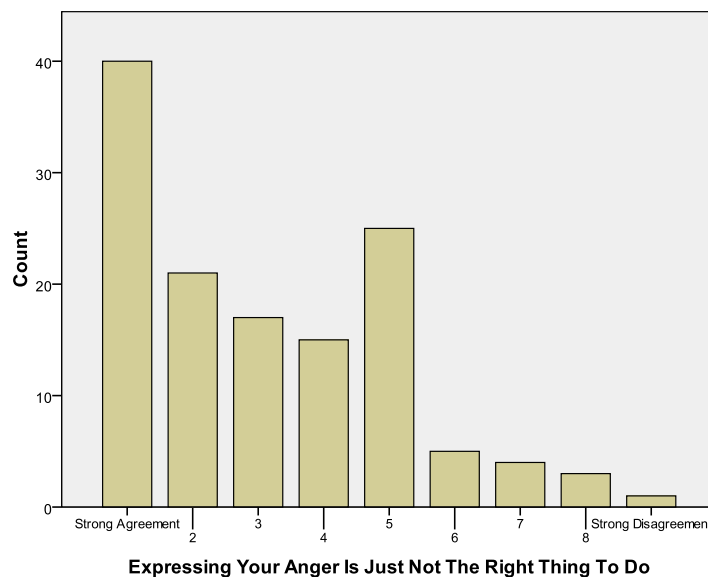


Figure 37: Bar chart to show the number of anger incidents in which participants' motive for suppressing anger was that expressing anger is not the right thing to do

#### *Statement 2: 'You felt that your position in relation to the offender meant you couldn't express your anger'*

As with the previous statement figure 38 below shows that there is general agreement with the statement 'you felt that your position in relation to the offender meant you couldn't express your anger'. Once again though, in a few instances there is some disagreement.

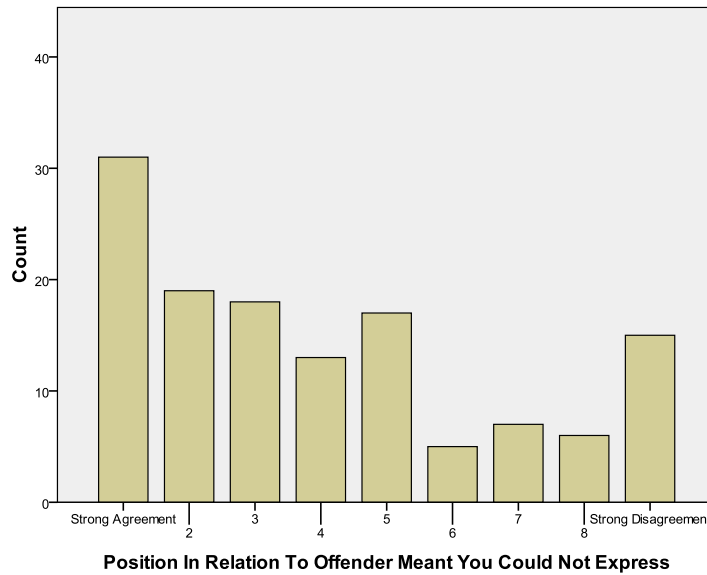


Figure 38: Bar chart to show the number of anger incidents in which participants' motive for suppressing anger was that their position in relation to the offender meant that they could not express their anger

***Statement 3: 'You didn't know how to express your anger in an appropriate way'***

Finally, the figure 39 below shows that the responses for 'you didn't know how to express your anger in an appropriate way' showed mixed results with some participants agreeing with the statement, some disagreeing with the statement and some not quite sure or undecided.

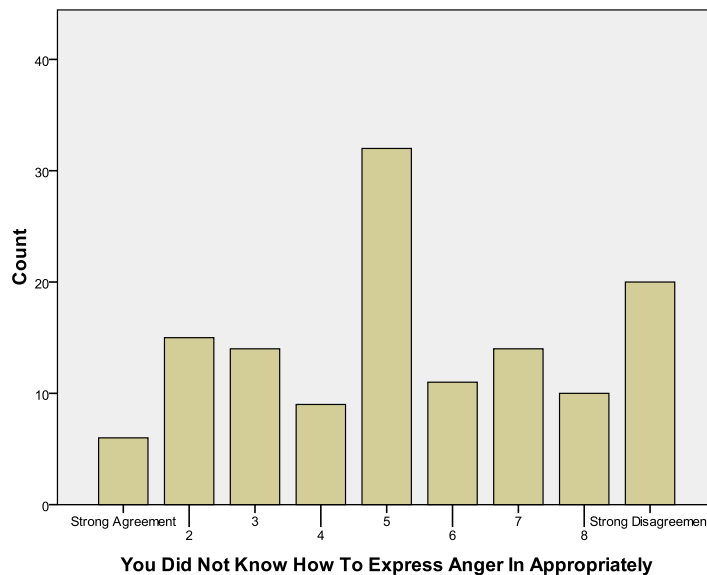


Figure 39: Bar chart to show the number of anger incidents in which participants' motive for suppressing anger was that they did not know how to express their anger appropriately

## 7.12 FAKING EMOTION

Section F of the anger diary dealt with faking emotion to try and find out how much angry persons were performing emotional labour and if so to what extent. The question from section F of the anger diary was as follows:

*To what extent are angry people trying to hide their anger from the offender and others and how much are they trying to express another emotion to the offender or others that they do not really feel?*

Figure 40 and 41 below show how much participants tried to hide their anger from the offender and also how much they tried to hide their anger from others who did not have anything to do with the incident. Both bar charts show that there was a broad range of responses for both questions.

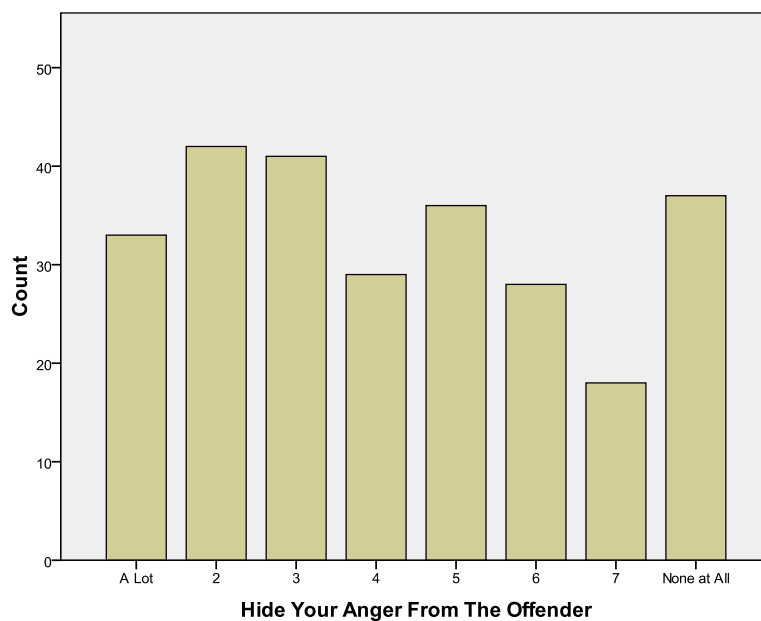


Figure 40: Bar chart showing the number of anger incidents in which participants stated how much they hid their anger from the *offender*

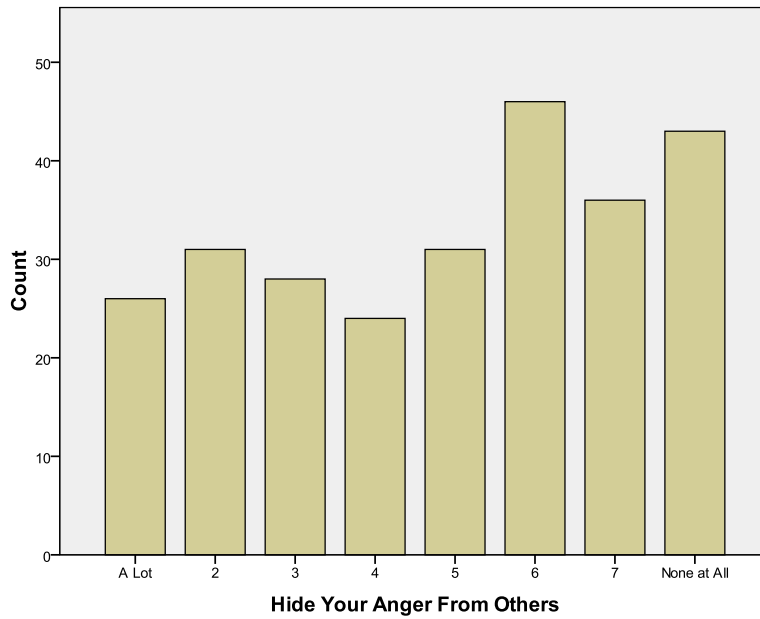


Figure 41: Bar chart showing the number of anger incidents in which participants stated how much they hid their anger from *others*

Figures 42 and 43 show in how many incidents participants agree or disagree with the statements ‘Instead of expressing my anger to the *offender* I tried to express another emotion that I did not really feel’ and ‘Instead of expressing my anger to *others* who had nothing to do with incident I tried to express another emotion that I did not really feel’. Both bar charts both show strong disagreement with the statements with participants agreeing in only a few incidences in both cases.

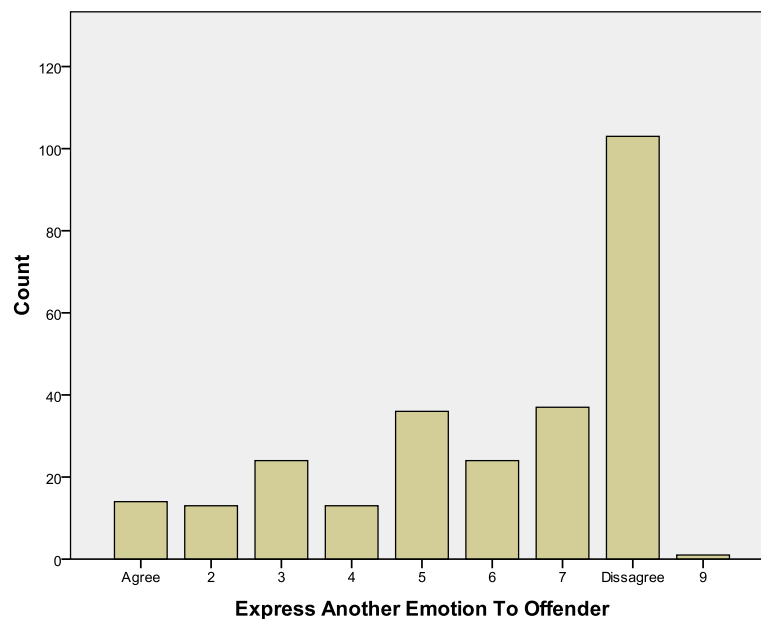


Figure 42: Bar charts showing the number of anger incidents in which participants agreed or disagreed with the statement that instead of expressing their anger to the *offender* they tried to express another emotion that they did not really feel

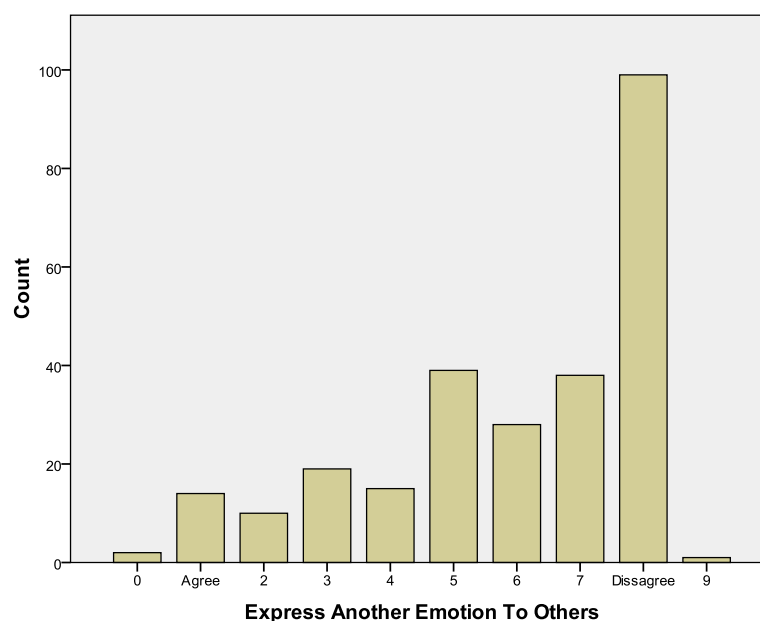


Figure 43: Bar chart showing the number of anger incidents in which participants agreed or disagreed with the statement that instead of expressing their anger to the *others* they tried to express another emotion that they did not really feel

## 7.13 JOB SATISFACTION

The final section of this chapter presents five box plots to show an overall picture of how satisfied participants are with certain aspects of their job. Each aspect of job satisfaction is looked at in turn together with a summary of how each one relates to the retail, wholesale, education and health sector. The boxplots show the median scores, that is, the score at the 50<sup>th</sup> percentile. In addition to computing the median as a measure of a typical employee's score, the 25<sup>th</sup> and 75<sup>th</sup> percentile scores were also computed. These scores provide some indication of the spread of variability of employees' satisfaction scores.

### 7.13.1 Scoring of the JDI and JIG

The scoring of the JDI and JIG (Balzer et al. 2000) was carried out using the manual instructions. Missing responses were treated as recommended by the authors, and as with all the data input in this study, the accuracy of scoring and data input was checked by a colleague.



### **7.13.2 Interpretation of the JDI and JIG**

The distribution of a number of individual scores, as opposed to looking at individual employees' scores, is recommended by the authors of the JDI and JIG. In this way, Balzer et al. (2000) state that it allows researchers to look at general employee trends within an organisation and compare them with similar employees from other organisations.

#### ***Satisfaction in the organisation as a whole***

Interpretation of the JDI and JIG is said to be based on two questions: a) are employees generally satisfied or dissatisfied or b) are employees more or less satisfied than employees in other organisations?

Absolute level of satisfaction deals with the question 'Are employees satisfied or dissatisfied?' and can be translated to mean whether employees are above or below some neutral point on each of the JDI scale or on the JIG. This neutral point would represent an ambivalent feeling, a balance of positive and negative feelings about aspects of the job or the job overall.

In theory, there is no real "neutral" point on any of the JDI or JIG scales. In practice, however, there is a limited range on each scale that would characterise persons who feel neither good nor bad about particular aspects of their jobs. Thus without attempting to pinpoint exact neutral point it tends to be reasonably close to the middle range of possible scale scores (0-54), or around a score of 27. Scores well above 27 (i.e. 32 or above) indicate satisfaction, while those well below 27 (i.e. 22 or below) indicate dissatisfaction.

Relative level of satisfaction deals with the question 'Are employees more or less satisfied compared with employees in other organisations?' is an important one. But we cannot directly compare JDI and JIG scores from one organisation with the JDI and JIG scores from another because differences in employee backgrounds and work situations are related to the ways employees respond to the JDI and JIG. These differences must be taken into account before comparisons can be made across groups or organisations. However, Balzer et al. (2000) propose that researchers wishing to look for direct

comparisons across groups and organisations can do so by comparing scores with national norms.

### ***Comparisons within the organisation***

Asking ‘Where are our weak points within the company?’ and strong points cannot be carried out here, as results are not collected from one organisation. What we can do is compare *absolute level of satisfaction* as an indication that anger experienced in certain organisations may be related to satisfaction but accept that other variables may be influencing the outcomes.

### ***Example of absolute level of satisfaction***

By plotting the range of scores and the median scores the boxplots provide clear information on employee satisfactions. So while it is clear that employees were satisfied with work, the scores on the Work scale ranged widely with some people very satisfied and some very dissatisfied. On the other hand, information on both the lowest JDI Coworker score and the median made it clear that all employees were satisfied with their coworkers.

### **7.13.3 Work and People**

Overall, the boxplots in figures 44 and 45 show that people in all four employment sectors appear to be satisfied with both their work and their coworkers. The boxplots for the retail sector, wholesale sector and health sector however do show that there is some degree of dissatisfaction with Work and People. On the other hand, in the education sector, the position of the boxplots made it clear that all employees in this sector were satisfied with their work. Furthermore, vast majority of people in the education sector were also satisfied with their coworkers.

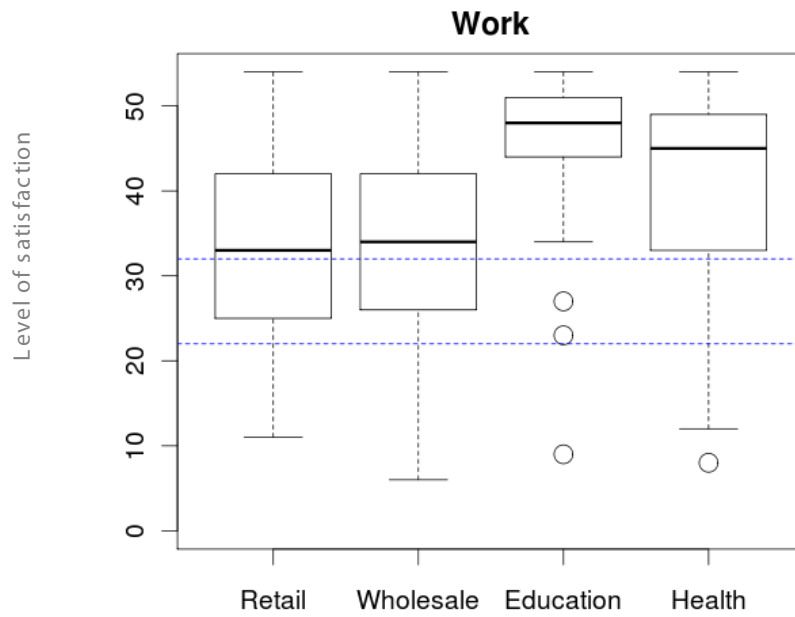


Figure 44: Boxplots to show how satisfied people are with their work

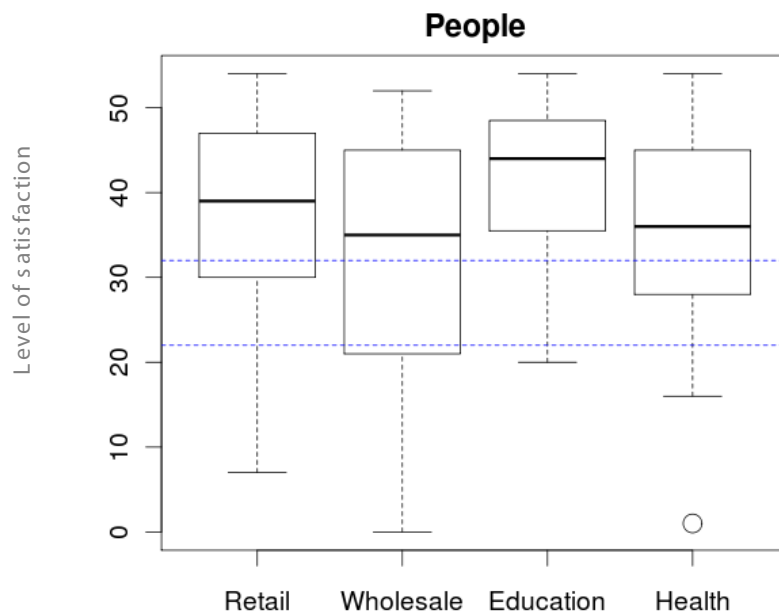


Figure 45: Boxplots to show how satisfied people are with their coworkers

#### 7.13.4 Supervision and Pay

The next two boxplots, figures 46 and 47, show how satisfied people are with Supervision and Pay respectively. With regards to Supervision, all the medians lie around 40, and the 25<sup>th</sup> percentile scores all lie within the neutral range, indicating

satisfaction with Supervision for all employees within the four employment sectors. The majority of people working in the wholesale and education sector are more than happy with the Pay aspects of their job. However, this is not the case for those working in the retail and health sector where half of all employees are dissatisfied with their Pay.

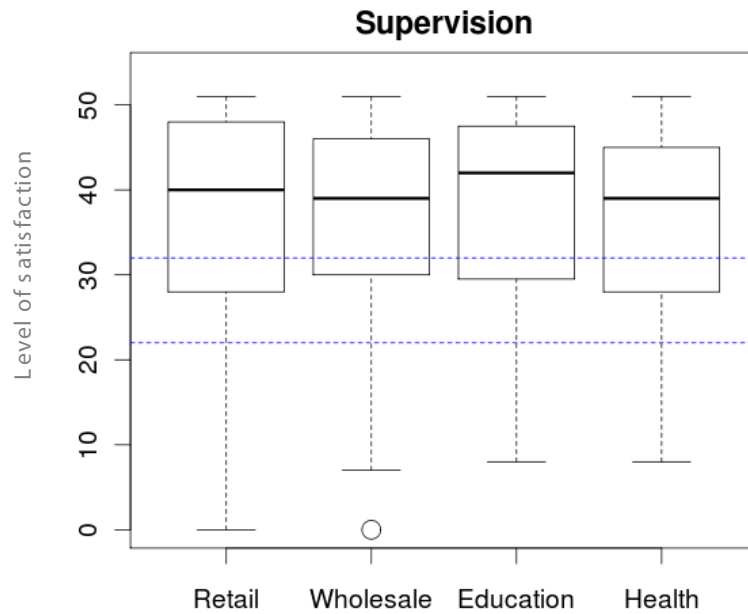


Figure 46: Boxplot to show how satisfied people are with their supervision

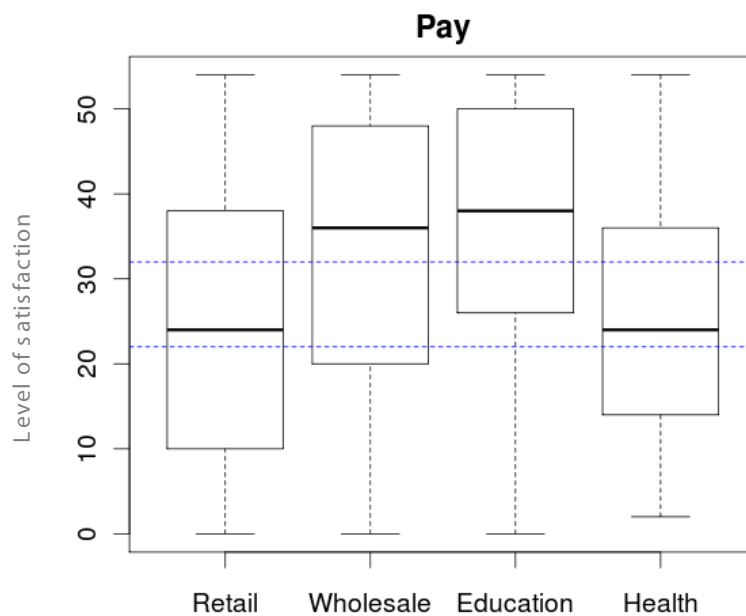


Figure 47: Boxplot to show how satisfied people are with their pay

### 7.13.5 Promotion

Figure 48 below shows that this is one aspect of job satisfaction in which there is general dissatisfaction amongst employees. The medians for wholesale, retail and health all lie below the neutral range indicating dissatisfaction with Promotion while the median for retail lies just above the bottom line of the neutral range. Furthermore, the spread of variability of scores is similar in all employment sectors. However, the health sector is the sector which is least satisfied with Promotion.

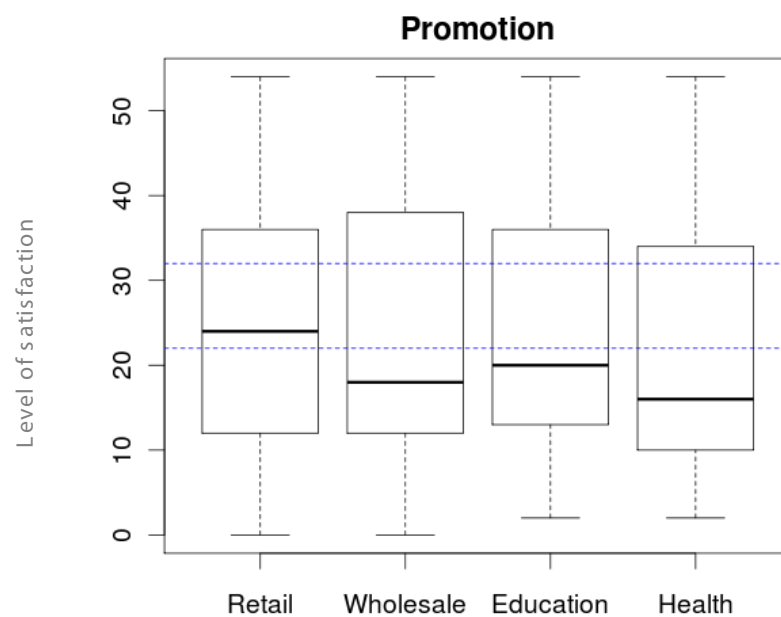


Figure 48: Boxplot to show how satisfied people are with their opportunities for promotion

## 7.14 DISCUSSION OF EXPLORATORY RESULTS

There follows a discussion of the main findings from the previous section. The end of diary questionnaire will be discussed first, followed by influences of anger, causes of anger, expression of anger, expression and behaviour, motives for expression of anger, suppression of anger and behaviour, motives for suppression, control of anger, faking emotion and job satisfaction. It must be noted though that some of the counts are extremely small in the tables. Therefore, it is difficult to draw solid conclusions with such low cell counts and the evidence is not as strong as the researcher would have liked. Hence, this should be taken into account in the discussion of the results.

### **7.14.1 Accuracy in reporting of anger incidents**

As in other diary research, questions on accuracy and omission in reporting were given to participants to fill in at the end of the diary keeping period (Tshcan et al 2005). Overall it would seem that 68 of the 187 (36%) participants who chose to fill in the end of diary questionnaire filled it in quite honestly and accurately. Although this is quite a low response rate, it does not suggest that the data can not be generalised to the wider population rather it provides an idea as to how truthful the participants were about their reporting of anger incidents.

Nearly half of all participants believed that the anger incidents they had experienced during the diary keeping period were typical of usual working life. In some ways this is positive, as it means that for the other half (53%) of the participants, the incidents were out of the ordinary. However, it could mean that experiencing an anger incident at all is unusual or that the type of incidents experienced was unusual.

On the other hand, these results could be construed as negative too, as nearly half reported these anger incidents to be typical of their working life. Maybe the experience of anger is different for these people than it is for the 'lucky' 53% in the sample. Maybe there were differences in the causes of anger or influences of anger. This could be something to look at in future research.

Also, 85% believed the diary captured their experience of anger at work. This means the information gained from the diary is homing in on the experience of anger in the workplace well. In addition 90% believed they did not omit any or very few anger incidents during the diary keeping period. This implies that the data collected could possibly comprise of a near complete account of the anger experience encountered within the four weeks that participants completed the diary.

Also 70% said they filled in the diary within 24 hours of the anger incident first occurring, and again, this is encouraging evidence that the accounts are a 'true' reflection of the experiences of anger. It is probably hard to achieve much higher than this as people tend to be busy at work and it may be difficult to find the time to complete the anger diary sheets. Also, this figure is similar to other studies that have

used ESM, and signal contingent methods, and found that participants complete questionnaires about 75% - 80% of the time (Miner, et al. 2005).

#### **7.14.2 Influences of anger incidents**

In the majority of incidents, participants tended to strongly disagree with the belief that mood, accumulation of anger and inadequate training had any influence on the anger incident happening in the first place. This is inconsistent with the findings from study one: the interviews, which had found that interviewees had believed that mood, accumulation of anger and inadequate training had an effect on the occurrence of anger incidents. Maybe this inconsistency is due to the methods used in study one, which as already highlighted could be due to memory biases in reporting on past events.

However, with regards to stress, participants did agree to some extent in a number of incidents, that it had an influence on the anger incident occurring in the first place. This is consistent with the findings in study one and previous research which suggests that anger is a key ingredient of work related stress (Mykeltun, 1985 as cited in Pekrun and Frese, 1992) and supports the notion found in study one that stress can not only be a consequence of anger but also an antecedent. The finding that stress is thought to be related to anger is also in keeping with the suggestions of AET which proposes that certain features of the work environment, in this case stress, influence the occurrence of affective incidents.

#### **7.14.3 Causes of anger**

The most common causes of anger are also the ones which were identified as the most common causes of anger in the interviews in study one, and previous research (Allcorn, 1994; Fitness, 2000; Grandey et al 2002): immoral behaviour, job incompetence, disrespect and unjust treatment. Therefore, the same trend seems to be appearing in the study two, with the larger sample, and over time. However, not only are the results supporting those found in previous research and in study one they are also showing the specific causes of anger within each category. Interestingly, people are angered by other people's laziness, or other people ringing in sick when the participant suspected they were lying. Both of which could be related to other people in general not 'pulling their weight'. Furthermore, inconsistent with previous research (Johnson and Indvik, 2000),

job insecurity had a particularly low count yet it has been suggested that this is a main cause of anger. It is a possibility that these numbers would have been a lot higher if the collection of data had been carried out during the current economic downturn.

#### **7.14.2 Source of anger**

The number of external incidents is relatively low compared to the internal incidents, with around three quarters of all anger incidents taking place internally and around a quarter taking place externally. This is inconsistent with previous research (Grandey et al. 2002) which has found that the majority of anger incidents over a two week period were between the workers and customers (i.e. external interactions). However, the amount of time spent with external and internal offenders was not taken into consideration in this study, and possibly this is something which could have had a profound effect on the results. Therefore, the amount of time spent with the customers for instance could be taken into consideration when looking at the proportion of internal and external incidences and individual's experiences of anger in future research.

Overall, with regards to causes of anger, apart from disrespect, they are considerably higher internally than they are externally. The next section looks closer at this relationship to discuss who the actual offenders were in both internal and external settings.

#### **7.14.5 Context of anger**

Coworkers were the group most likely to make participants angry at work. This is followed by a superior, manager or supervisor. Furthermore, the causes of anger differ depending on the context of the anger incident. When the offender was a superior, manager or supervisor, the most common reasons for participants becoming angry were unjust treatment, in particular being unjustly criticised, mismanagement and absence of recognition. If the offender was a coworker the most common cause of anger was immoral behaviour, particularly a coworker being lazy, and others' job incompetence, specifically, the offender not doing their job properly. When the offender was a subordinate it was immoral behaviour and unprofessional behaviour.



This is partially consistent with the research carried out by Fitness (2000) who also found that superior-instigated incidents most commonly involved unjust treatment, and that coworker-instigated incidents commonly involved others' immoral behaviour. However, in Fitness' (2000) study, job incompetence, as opposed to immoral behaviour, was the most common reason for anger, when the instigator of anger was a subordinate. Overall, the findings from this present study support one of the most notable findings from Fitness' (2000) study on people's descriptions of anger incidents, which shows that causes of anger differ depending on who the offender is.

Such differences in the causes of anger would need to be taken into consideration if managers are trying to prevent anger incidents from happening in the first place. With more specific knowledge about what causes people to become angry, anger prevention programmes could concentrate on the behaviours that are making people angry at work. Furthermore, managers could try to prevent workers from behaving in such a way so as to reduce the instigation of anger in others, or equip workers with different and better techniques with which to deal with the people with whom they work.

#### **7.14.6 Employment sector, number of anger incidents and causes of anger incidents**

The number of anger incidents is fairly similar for the retail and wholesale sector, with numbers slightly increasing for the education and health sector. With regards to the causes of anger and employment sector the most common causes of anger in the retail sector are job incompetence, unjust treatment and disrespect. For the wholesale sector, the most common cause of anger is immoral behaviour. In the education sector, the most common causes of anger are immoral behaviour, disrespect and unprofessional behaviour. Finally in the health sector it is immoral behaviour, job incompetence, disrespect and humiliation.

Looking at these causes in more detail it can be seen that compared to the retail sector, wholesale, education and health have rather large number of anger incidents caused by immoral behaviour compared with the retail sector, and in particular, the education and the health sector suffer from incidents which involve disrespect as the cause of anger. In the education sector unprofessional behaviour stands out as being noticeably more common compared with other sectors as does humiliation in the health sector. Thus, it

is interesting to note that as with contexts of anger incidents, certain sectors may be more prone to certain types of anger incidents than others. However, it is difficult to compare these findings to previous research due to the lack of research carried out in different employment sectors on anger incidents. However, the findings do suggest that once again, anger management programmes that are carried out within one employment sector may not be appropriate for another; therefore, programmes may need to be tailor-made to suit a particular sector.

#### **7.14.7 Frequency, intensity and duration of anger incidents**

Nearly half of all participants that took part in the anger diary study experienced no anger incidents at all. Of the other half that did, the majority of these only experienced one or two incidents over the four week period. This is inconsistent with previous findings (Averill, 1984; Glomb & Hulin, 1997; Gibson & Barsade, 1999) which have found that anger is experienced frequently at work. Maybe the difference in findings is due to the differences in the methods used to collect data on anger incidents. In these previous studies which have used one-off reports of anger and recall of emotions, memory bias (Fisher, 2002), overestimation of frequency of incidents (Fisher, 2005; Wheeler & Reis, 1991), memory decay and the 'peak end' rule (Bolger et al. 2003) may have influenced participants reporting of events. Therefore, participants may be overestimating the number of anger incidents in such studies and giving a false impression of what is occurring with anger at work. Maybe the results from this present study are an actual reflection of what is really happening with regards to anger at work. However, further work would need to be carried out using the same methods as the present study to confirm the actual occurrence of anger incidents.

Looking at the duration of anger incidents, around 20% of anger incidents lasted 5 to 10 minutes and the majority of the remaining incidents tended to last a lot longer than 5 to 10 minutes, with 20% lasting half a day to one day or more. So this does suggest that although participants may not have been experiencing anger frequently, their anger did tend to last in a number of incidents. This is in keeping with research carried out by Averill (1982), who found that anger tends to endure in time, and it is also in keeping with the findings from Gibson and Barsade (1999) who propose that anger is not only an episodic emotion, but it is one that is experienced chronically too.

In addition, the anger incidents experienced by participants were moderate to very strong in intensity. Furthermore, as the end of diary questionnaire results show, half of the participants who filled in the questionnaire said that the anger incidents experienced in the diary keeping period represented normal working life. So for a substantial number of participants' anger incidents may not be experienced frequently, but when they are they may be quite intense and may last a long time. Hence it would seem as Grandey et al. (2002) says that most workers are likely to feel intense anger when they do become angry at work. Grandey et al. (2002) goes on to argue that it is the intensity of emotions felt, as opposed to the frequency of emotions felt, that affect how people will feel and behave at work. So although frequency, intensity and duration of anger incidents and their association with other factors in the model were not investigated in the present research, this could be looked at in future research.

#### **7.14.8 Expression and suppression of anger**

##### *Expression, suppression and source*

Overall, the majority of anger incidents that involved expression and suppression of anger tended to happen in internal settings. Although little research has been carried out on sources of anger, these findings are inconsistent with those found by Grandey et al. (2002) which discovered that anger incidents were mostly customer induced as opposed to colleague induced. However, clues from research (Fitness, 2000; Pertemps, 2002) carried out in the workplace between colleagues suggest that anger incidents certainly exist between colleagues and this study provides further evidence for such findings.

##### *Expression, suppression, source and context*

The exploratory data shows that internally, when comparing the differences in the number of incidents which involved anger expression, that overall the majority of anger incidents take place with a coworker, followed by a superior, manager or supervisor and finally by a subordinate. However, no matter who the offender is, there are a greater number of incidents in each case which involve suppression. However, this difference is smallest when the offender is a subordinate and greater when the offender is a coworker or superior, manager or supervisor.

When comparing the differences in the anger expression and the offender externally, it can be seen that anger expression most commonly occurs with a student or pupil followed by a patient then finally customer, client or supplier. Furthermore, the number of incidents that involve anger suppression are only greater than anger expression when the offender is a customer. When the offender is a patient or student or pupil, then the number for expression is greater.

Firstly, these findings show that not only are there a greater number of incidents happening internally, but that colleagues in the anger incident in this study were suppressing anger more than expressing anger, and that the differences in figures between expression and suppression show that angry people are suppressing more so from managers than coworkers or subordinates. Furthermore, although there are considerably fewer incidents taking place externally, angry people only tended to suppress their anger more when the offender was a customer, client or supplier but expressed their anger more when they were a patient and particularly student or pupil. These findings are consistent with those found by Ravid et al. (2009) who found that workers believed that anger should be suppressed from managers more so than from coworkers or subordinates, and anger should be suppressed more so from customers (i.e. external sources) than from coworkers, subordinates and managers. However, patients, students and pupils were not included in Ravid et al.'s (2009) study. Nonetheless, this present research provides further evidence to suggest that the status of the offender has a bearing on the outcome of the incident and whether or not the angry person expresses or suppresses anger.

### *Expression, suppression, employment sector and context*

Overall, the occurrence of anger expression was equally likely to occur in each of the four employment sectors. However, an occurrence of anger suppression was more frequent in the health sector followed by the education sector and less frequent in the retail and wholesale sector.

#### **Wholesale**

Looking further at both employment sector and context, it can be seen that expression in the wholesale sector between coworkers is quite high compared to the other offenders and employment sectors. Suppression was more likely to take place between coworkers

than it was with any other offender too, so it seems that there is a similar amount of expression and suppression between coworkers in the wholesale sector.

### **Retail**

Expression in the retail sector mostly took place between colleagues than with customers, clients or suppliers, and with suppression in the retail sector, most incidents were when the offender was a superior or a subordinate followed by a customer, client or supplier.

### **Health**

The numbers for expression of anger in the health sector were similar regardless of the offender's status; however, numbers are at their highest when the offender was a patient. With suppression of anger, numbers are particularly high in the health sector when the offender is a coworker or a supervisor, manager or supervisor, with only a small number of incidents involving suppression from a subordinate or patient.

### **Education**

Expression of anger was lower between colleagues in education than it was towards students or pupils, and the expression of anger to a student or pupil is quite high compared with other offenders. With suppression of anger, the opposite occurs, with numbers higher in interactions between colleagues, particularly when the offender was a subordinate, followed by a supervisor and coworker. Numbers were particularly low when the offender was a student or pupil.

The purpose of investigating incidents within different sectors was not only to enable the results of the research to be generalised to the wider population, but also to determine if the culture of a workplace could be acting as a filter which influences whether or not angry people will express or suppress their anger. Although the organisational culture was not measured itself, finding out in which sectors angry people chose to express or suppress their anger, gives some indication as to what the display rules may be within that organisation and sector. As Rafaeli and Sutton (1989) have proposed, norms may affect the way workers feel, with regard to the freedom to express their emotions at work. Although it is difficult to compare these findings to previous research on anger in different employment sectors, the results do suggest that the number of anger incidents which involve expression of anger is similar across

sectors. However, numbers for expression are particularly high in the health and education sector, and are lower in the retail and wholesale sector. Furthermore, the results also show that in each employment sector, the offender seems to have an effect on whether or not the angry person expresses or suppresses their anger.

#### **7.14.9 Expressive and suppressive behaviour**

##### *Source of anger*

Overall, the majority of anger incidents which involved participants engaging in some type of expressive behaviour tended to happen internally. When they did happen, participants were most likely to use verbal abuse towards the offender, followed by verbal non-abuse and body language. Very few participants were likely to engage in physical aggression. Furthermore, there was a tendency for participants to use body language when the incident was internal compared with external incidents.

As with expressive behaviours the majority of anger incidents that involved suppressive behaviours tended to happen internally. Overall, when they did happen, most participants were more likely just to stay quiet and get on with their work than they were just to walk away from the offender.

##### *Context of anger*

Internally, expressive behaviour was most likely to occur when the offender was a coworker followed by a superior. The behaviour most commonly engaged in between coworkers was verbal abuse, whereas when the offender was a supervisor it was body language. Externally, expressive behaviour tended to occur when the offender was a student or pupil, with verbal abuse being the most common behaviour.

Furthermore, similar to expressive behaviour, participants also tended to engage in suppressive behaviours when the offender was a coworker, followed by a superior. The behaviour most commonly engaged in by all participants was just staying quiet and getting on with their work. Externally, suppressive behaviours tended to occur when the offender was a customer, client or supplier.

When looking at the source and context of anger incidents these results are inconsistent with previous research (Fitness, 2000; Grandey et al. 2002) which suggests that internally, angry people are more likely to confront subordinates following an incident, and least likely to confront coworkers, and even more less likely to confront superiors, managers and supervisors (Ravid et al. 2009). However, the results do suggest that only a small number of angry people are engaging in expressive behaviours to customers, clients and suppliers. This could be because people may be more aware of the display rules for such interactions and maybe trained to deal with such offenders. Also, displaying such anger to customers, clients and suppliers usually carries with it more severe consequences than possibly doing so in internal settings.

### ***Employment sector***

Overall, expressive behaviours were quite similar across all sectors although slightly higher in the education sector. Verbal abusive behaviour tended to occur in the education sector, followed by the retail and wholesale sector and least likely to occur in the health sector. With regards to non verbal abusive behaviour, this was least likely to occur in the retail sector and wholesale sectors and more likely to occur in the education and health sectors. Body language was quite similar across all sectors, and although physical aggression counts are low, the majority were in the retail sector. The majority of suppressive behaviours occur in the health sector and participants are more likely just to stay quiet and get on with their work.

Again, as employment sector and anger has not been investigated in previous research on anger, it is difficult compare these results to prior research. However, the findings do suggest that angry people are engaging in a variety of behaviours across employment sectors and that these behaviours, although not physical aggressive in nature, tend to be verbally abusive in nature, particularly in the education sector.

#### **7.14.10 Motives for the expression and suppression of anger**

The pictures for motives offered for expression of anger were all very different. Firstly, although there were a few incidents in which participants expressed their anger because they wanted to intimidate their offender, the majority did not do it for this reason. Secondly, responses for participants expressing because they just could not contain their

anger anymore were mixed. Finally, there was general agreement for the final motive for expression of anger, that the participant wanted the offender to know what they had done.

In the majority of incidents participants suppressed their anger because they believed expressing their anger was just not the right thing to do at work, or that their position in relation to the offender meant that they could not express their anger. For the incidents in which participants did not know how to express their anger appropriately, the responses were mixed.

These results suggest that as with previous research that participants wanted to express their anger in order to let off steam because they could not contain their anger anymore (Averill; 1982) or because they wanted to let the offender know what they had done (Fitness, 2000). Furthermore, the results show the reasons for the angry person suppressing their anger; something which is often overlooked in studies on anger. The results provide more information as to why people express or suppress their anger and will ultimately help in the creation of the management of the emotion of anger itself.

#### **7.14.11 Control of anger**

There were very few incidents which involved control of anger; however, out of the small number of incidents that did take place with control of anger, most took place with a coworker followed by a patient and student. With respect to the employment sector, most of these incidents took place in the education sector, of which 5 were with a student or pupil and most incidents took place in internal settings. Controlling anger is said to be effective for the individual, with regards to health outcomes (Burns et al, 1999) and the organisational outcomes (Gibson and Callister, 2010) so it is unfortunate that more people are not trying to control their anger. Furthermore, the low numbers of people who control their anger, limits the amount of research that is available to be carried out on anger control. Nonetheless, future studies on anger could try and identify if there is a certain group of people who tend to control their anger and explore the factors associated with this.



#### **7.14.12 Faking emotion**

In the present study participants tended to hide their anger from the offender or others, who did not have anything to do with the incident, but they did not try to express another emotion that they did not really feel either to the offender or others who did not have anything to do with the incident. This is consistent with previous findings in which studies have shown that people to suppress their anger (Grandey et al. 2002 Mann, 1999) in interactions at work. However, angry people did not admit to trying to express another emotion to the offender or others that they did not feel. Nonetheless, participants could have suppressed anger and expressed a neutral emotion; this is still emotional labour, or rather emotional dissonance and can carry with it all the negative effects of emotional labour.

#### **7.14.13 Job satisfaction**

Finally, and for interest purposes only at this stage, the exploratory results show that in general people seem satisfied with their work and their colleagues. Furthermore, the majority of participants are more than happy with their supervision and those in the wholesale sector and education are happy with their pay. This may not be the case for those in the retail and health sector who are not that satisfied with their pay. Finally, there is general dissatisfaction amongst all sectors with promotion. These results will be looked at in greater detail in the next section.

## **CHAPTER 8**

### **RESULTS AND DISCUSSION FOR STUDY TWO - THE ANGER DIARIES**

#### **SECTION TWO**

##### **The predictors of expression and suppression of anger**

#### **8.1 OUTLINE OF THE CHAPTER**

The aim of this chapter was to find out if gender, context (including source), employment sector, cause of anger, influences of anger (i.e. stress, mood, accumulation, inadequate training), job satisfaction (JDI pay, promotion, supervision, people), JIG, dispositional anger (State Anger, Trait Anger and AX Index) was associated with expression or suppression of anger at work. The predictions were developed from the theoretical model. (The highlighted areas on the theoretical model illustrate which variables were being tested. See appendix 15).

In fitting the model there were two tests that were carried out. The first test allowed the researcher to find out whether or not the factors and covariates were providing any information (Test of Model Effects). The second, the Parameter Estimates table, included tests on how significant the levels were within a category, with respect to the reference category. In short they are both important. For example, the Test of Model Effects tells us that the context (i.e. the relationship with the offender) is important in predicting whether or not someone expresses their anger while the second gives us an idea of how; thus the only real difference is between customer/client/supplier and student/pupil.

The results for expression and suppression of anger are presented in the following chapter. It provides an analysis of the independent variables that were identified as being related to the dependent variable, expression of anger, and it also provides a step by step approach of how the independent variables were identified.

A Logistic General Estimating Equation (G.E.E.) with a Logit Link Function was used to test the distribution of the dichotomous dependent variable expression and suppression of anger. The model built looked at which attributes of an anger incident

influenced expression of anger to offender. The analysis was performed using the statistical software package SPSS version 17 and the data file was re-arranged into the format SPSS required to perform the analysis.

### 8.1.1 Presentation of results

An outline of the chapter together with its aims are presented in the table 23 below.

Table 23: Outline and aims of the expression and suppression of anger chapter

OUTLINE OF RESULTS SECTION	AIM
Describe the statistical techniques used Generalising Estimating Equations	To provide the rationale to the reader for the statistical techniques used
Stages in the analysis	To provide the reader with the understanding of how the model was fit to the data
Present the final model	To investigate the effects the independent variables had on the dependent variable
Odds Ratio Plots and Confidence Intervals for the model output: Cause of Anger, Employment Sector and Relationship with Offender	To provide a visual aid to help interpret the model and to establish that the results for each factor's category in relation to expression of anger to the offender will lie between two certain values with 95% confidence

## 8.2 THE STATISTICAL TECHNIQUES CHOSEN FOR ANALYSIS

As mentioned in the previous chapter, the data was obtained from 187 participants and carries a description of each of their personal characteristics, such as their gender, the employment sector to which they belong, the position held, their STAXI-2 score and JDI and JIG score. Data was also collected on each anger incident experienced by each of the participants. Some of these participants did not experience any anger incidents at all over the whole diary keeping period. Some, on the other hand, reported multiple anger incidents and some only a single incident. This resulted in the data set comprising of 357 cases. Within these 357 cases there are 268 anger incidents described, which means that there were 89 participants who claimed to have no incident at all. The remaining 98 participants within the data set therefore experienced one or more anger incidents in the time period.

Each anger incident is also described in terms of a number of attributes, such as source, context, influence of anger incident and characteristics. For those participants that experienced more than one incident, it is possible that their incidents are correlated in some way. That is, a given individual's experience of anger may be similar across incidents simply because it is the same person experiencing them. This results in a possible *dependency* in the data set, with each anger incident possibly dependent on the person experiencing it.

A common assumption among many statistical techniques is that of *independence*: that is, that observations described within a data set are independent of one another. However, knowing the attributes of one set of observations does not tell one anything about the attributes of another set of observations. In the current study it is not appropriate to make this assumption, since knowing about the attributes of an anger incident experienced by a given person may tell us information about the attributes of another anger incident experienced by the same person. This means more sophisticated modelling techniques that can take account of the possible dependency within the data need to be applied.

Data that follows this sort of structure is called Panel Data. In particular, it is called Longitudinal Panel Data because of the element of time that is involved in the organisation of the data points. By this it is meant, that the incidents that related to a given participant do not all occur at once, they occur at different points in time. The word Panel takes on different meanings depending on the precise structure of the data. However, in this case the Panel is the participant whose anger incidents are under study. This is defined using the definition of a Panel within a Longitudinal Data Set given by Hardin and Hilbe (2002) who state that the observations within a panel come from the same experimental unit measured over time.

### **8.2.1 Generalizing Estimating Equations**

Generalizing Estimating Equations (GEEs) are one such family of models that take into account such dependencies. The particular type of model used in this analysis is referred to as a Population Averaged GEE (PA-GEE). This sort of model deals with the dependence by averaging effects over all panels. This means that when it comes to interpreting the output of the model, the relationship between the independent variables

and the dependent variable is considered with respect to a population rather than a single individual. The outcome variable used was express to offender. This is a binary variable that is it only has two possible outcomes: Yes ('I did express my anger') and No ('I did not express my anger'). Further details of the dependent variable will be given shortly, however due to the binary nature of the dependent variable a Logistic GEE with a Logit Link Function was used.

### 8.2.2 What is a link function?

The aim in statistical modelling is to relate a selection of independent variables to a dependent variable to see if the influence the independent variables have on the dependent variable is particularly strong, and if so how strong. This is illustrated in the figure 49 below (Yeend and Sharples , 2010).

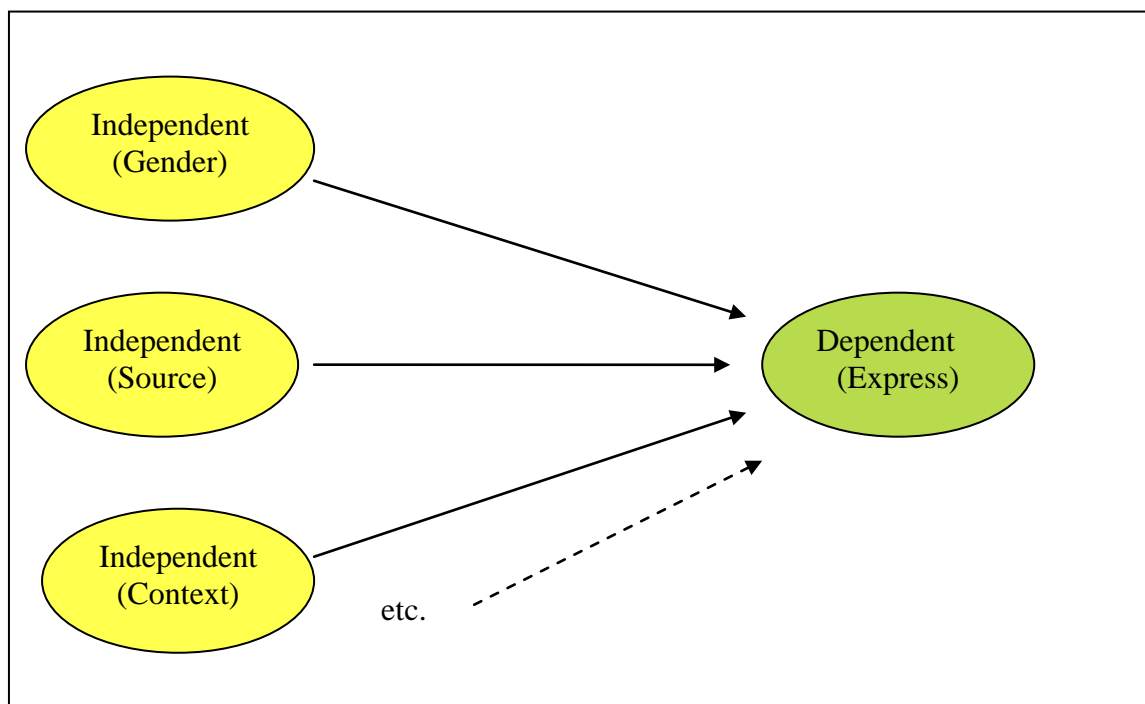


Figure 49: Illustration of statistical modelling. Source: Yeend and Sharples (2010).

However, in GEEs the model does not directly relate the independent variables to the dependent variables. The relationship is made via what is called a link function. The link function converts the linear prediction, which is comprised of the independent variables into an estimate of the expected value of the dependent variable. See figure 50.

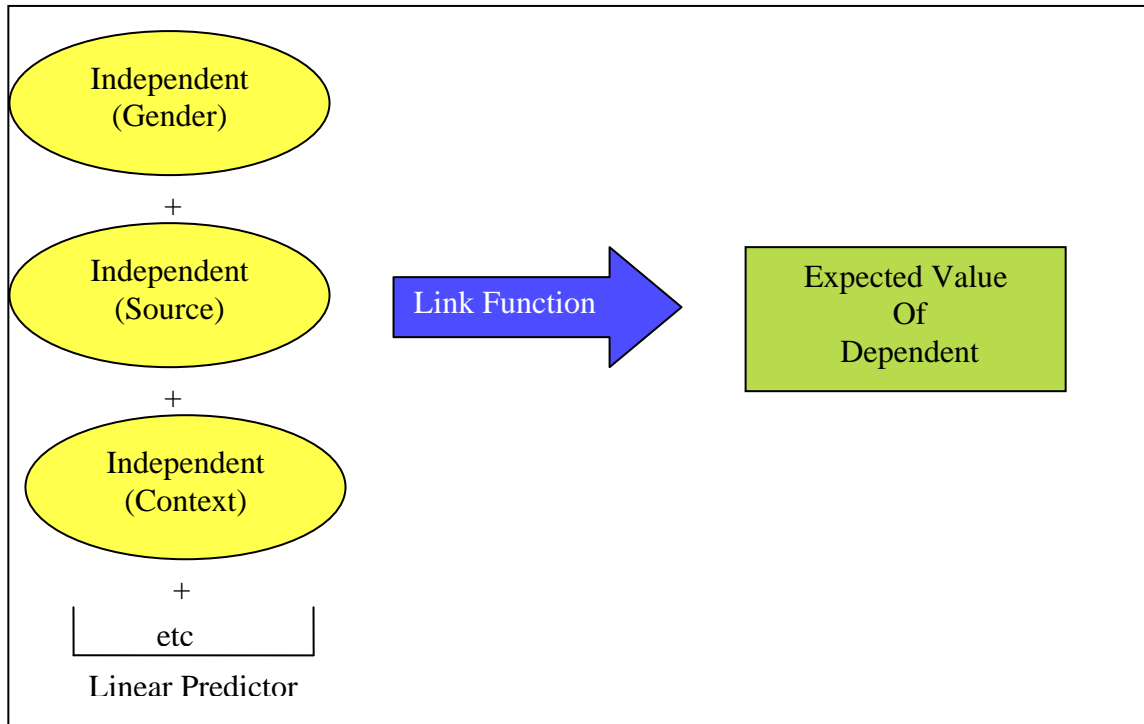


Figure 50: Illustration of GEE modelling using a link function. Source: Yeend and Sharples (2010).

### 8.2.3 Why not use another statistical technique?

For this kind of situation, multi level modelling (MLM) tends to be the popular technique among social scientists but there is no reason why GEEs can not be used. MLM was not used in this case as SPSS can not perform MLM on binary data. In fact, it can only do MLM for normally distributed data. Hence this is why a lot of social scientist tend to use MLwiN (Yeend and Sharples, 2010). However, the researcher did not have access to MLwiN in this particular case hence a Logistic General Estimating Equation was used. This can account for the hierarchical structures in the data which existed due to the repeated measures from the same people.

### 8.2.4. The dependent variable

The model built looked at which attributes of an anger incident influenced expression to offender. Within the anger diary participants could mark whether in a given anger incident they expressed, suppressed or controlled anger. It was found that only 25 incidents involved control of anger. These incidents were dropped from the analysis so

that the model could then account, not just for whether or not the incident involved expression, but whether the incident involved expression or suppression.

### **8.2.5 Recoding**

Some of the levels within cause of anger number contained very few counts. This was causing problems in producing a sensible model and so the levels were collapsed as follows to increase the count size:

#### *Levels left the same:*

- Immoral behaviour
- Unjust treatment
- Job incompetence
- Disrespect
- Poor communication
- Mismanagement
- A repetitive problem
- Powerlessness
- Lack of team work
- Unprofessional behaviour

#### *Collapsed levels:*

- Lack of support, being ignored and absence of recognition were collapsed to count as one level.
- Humiliation and jealousy were collapsed to form one level

#### *Dropped level:*

- Job insecurity. This level only contained one incident. It did not make sense along side any of the other levels so it was dropped from the analysis.

## **8.3 GENERALISED ESTIMATING EQUATIONS**

This next section outlines the steps taken to carry out analysis on the data.

### **8.3.1 Selecting cases**

First of all the data was filtered according to certain criteria. Examples of one criterion include filtering out those participants who said they controlled their anger. One reason for doing this is so that an inference can be made from the results of an expressed anger model, that those who did not express their anger actually suppressed their anger, rather than suppressed *or* controlled their anger.

### **8.3.2 Fit A Logistic GEE**

Next the Generalised Estimating Equation (GEE) was fit to the anger data set. A logistic model was fit to E1\_Express\_Express\_To\_Offender using all other factors and covariates as explanatory (independent) variables. The reference category was set to the first level and all variables were specified as having a main effect.

### **8.3.3 Remove variables**

The next step in the modelling process was to remove non-significant variables. The Test of Model Effects table is used to determine whether or not a parameter should be removed. If the p value of the variable is greater than  $>0.05$  it is removed from the model and the model is rerun.

### **8.3.4 Interpreting the output**

The Goodness of Fit statistic gives an indication of the Goodness of Fit of a model has to the data. The (QICC) value should be at its lowest once all non-significant variables have been removed.

The Tests of Model Effects tests the effect of removing each independent variable from the model and is useful in deciding which ones need to be retained in the model and which ones need to be discarded. The independent variables are dropped one at a time from the model. Statistics are computed which give an indication of how good the model is. Then the variable is put back into the model, the next variable is removed and the statistics repeated. When all the values are below 0.05 the model is accepted and interpretation of the parameter estimates can be made.



### **8.3.5 Parameter Estimates Table**

The beta coefficients are the effects given to each of the variables. The first level of Employment\_Sector the beta estimate is 0. This is because it is taken to be the reference category. In every factor, one of the levels is taken to be the reference category. In order to interpret the actual effect of the parameter one needs to exponentiate the beta value. SPSS does this automatically and the results of this are shown in Exp (B) column. The effects are actual odds ratio relative to the reference category.

## **8.4 THE FINAL MODEL**

It was decided that in order to make the model easier to interpret and easier to read the order of the variables would need to be reordered: in this way the ratio will be phrased in the larger direction. The new model will still be the same as this first model; however the categories within each variable will be changed around. Therefore the reference category will be changed and the odds ratios (Exp (B) values) will change. An explanation of how this was carried out is given below.

### **8.4.1 Reordering of variables in the final model**

In order to make the table more meaningful and easier to interpret the order of the levels for the following factors were changed:

- Employment \_Sector
- A\_Relationship\_w\_Offender
- B1\_Cause\_of\_Anger\_Number

The categories within each variable were sorted so that the order of the categories and the odds ratios can be interpreted in terms of an increase in the odds of expressing relative to the baseline or reference category. Therefore as mentioned the reference category and odds ratios (Exp (B) values) have changed but the model is still the same as the previous one. The recoded categories and new codes for each of the categories

within the employment sector, relationship with offender and cause of anger can be found in appendix 16.

#### 8.4.2 Goodness of Fit for the model

After reordering the variables the model is rerun. The QIC and QICC are shown in the table 24 below. QIC is the quasi-likelihood under independence criterion and the QICC (the corrected quasi-likelihood under independence criterion), is a corrected version which penalises for model complexity (that is it rewards for parsimony).

Table 24: Goodness of Fit for the model

<b>Goodness of Fit<sup>b</sup></b>	
	Value
Quasi Likelihood under Independence Model Criterion (QIC) <sup>a</sup>	308.370
Corrected Quasi Likelihood under Independence Model Criterion (QICC) <sup>a</sup>	305.480

Dependent Variable: Express Anger to Offender  
 Model: (Intercept), Employment Sector, Relationship with Offender, Cause of Anger, Already Stressed, JDI Work, JDI People

a. Computed using the full log quasi-likelihood function.

b. Information criteria are in small-is-better form.

#### 8.4.3 Test of model effects

Table 25 shows that all the variables in the final model are considered to be statistically significant in explaining the dependent variable Express to Offender. Table 25 shows the variables which are statistically significant in explaining Express to offender

Table 25: Test of model effects

<b>Test of Model Effects</b>			
Source	Type III		
	Wald Chi-Square	Df	Sig.
(Intercept)	7.345	1	.007
R_Employment_Sector	17.605	3	.001
R_A_Relationship_w_Offender	15.456	6	.017
R_B1_Anger_Number	21.279	11	.031
C_Already_Stressed	7.893	1	.005
JDI_Work	6.422	1	.011
JDI_People	15.224	1	.000

Dependent Variable: Express Anger to Offender  
 Model: (Intercept), Employment Sector, Relationship with Offender, Cause of Anger, Already Stressed, JDI Work, JDI People

#### 8.4.4 The re-ordered final model

By recoding the categories, a series of odds ratios that can all be interpreted in terms of an increase in the odds of expressing relative to the reference category, have been obtained. The parameter estimates table can be seen in appendix 17. In order to interpret the final model the information below is provided:

- B = Log Odds
- Std Error = Standard Error of the Log Odds
- 95% Wald Confidence Interval = gives the CI for the estimate of the Log Odds
- Hypothesis Test = The hypothesis test looks at whether a category within a variable is significantly different to that of the reference category.
- Exp (B) = Odds ratio
- 95% Wald Confidence Interval for Exp (B) gives the CI for the Odds Ratio

#### 8.4.5 Presentation of results of the model

In the parameter estimates table each level of the retained factor variables are listed. For each variable there is a baseline level i.e. the reference category. This level has an effect (B column) of zero. All other levels with in the same factor are compared to this

baseline level. So, for employment sector level 1 is the baseline category. The coding of the variables in the SPSS data file level 1 is health. The others are:

Level 1 Health

Level 2 Education

Level 3 Retail

Level 4 Wholesale

As each level within each factor is compared to the baseline level it actually gives the odds of expressing for those particular people when keeping all other things the same. All the results are in terms of expression: this means that the higher the Exp (B) the more likely angry incidents will end up in expression of anger and therefore less likely to end up in suppression of anger. An example of how to interpret the model is given below.

The model looks at the odds of expressing relative to suppressing of a given category to its baseline (reference category). For instance, if the exp (B) (i.e. the relative odds) value is 2 for category A this means that the odds for expressing (relative to suppressing) are *twice that* of the odds of expressing in the baseline category. So in short, those in category A are *more likely to express* than those in the baseline. If the exp (B) value is 0.5 for category B, then we can say the odds of expressing (relative to suppressing) are *0.5 times* that of the odds of expressing in the baseline category. So we can say the odds of expressing (relative to suppressing) are *half that* of the odds of expressing in the baseline category. In short, those in category B are less likely to express than those in the baseline. Since the only other option to express is suppress, we can say that those in category B *are more likely to suppress* than those in the baseline.

In addition, a dotplot will be presented which will help to illustrate the means odds ratio, 95% confidence interval and significance level (p value) of each level within in factor. The significance level of 5% was chosen in this case as the 1% level was deemed too stringent.

To make it easier to interpret the table it will be split into four sections with the following headings:

1. The employment sector and the expression and suppression of anger
2. The context and the expression and suppression of anger
3. The causes of anger and the expression and suppression of anger
4. The influences of anger and job satisfaction and the expression and suppression of anger

#### 8.4.6 Employment sector and odds of expression of anger

The Exp (B) column for the education sector is 1.674. This tells us that the odds of expressing for those in the education sector is just over one and a half times that of those in the health sector keeping all other things the same.

The Exp (B) column for the retail sector is 2.981. This tells us that the odds of expressing for those in the retail sector is almost three times that of being in the health sector with the same responses to all other attributes in the model.

The Exp (B) column for the wholesale sector is 6.530. This tells us that the odds of expressing for those in the wholesale sector are around six and a half times greater than those of being in the health sector who gave the same responses to all other attributes in the model. The results are displayed in the table 26 below.

Table 26: Parameter estimates for employment sector

Name of Parameter	B	STD. ERROR	95% WALD CONFIDENCE INTERVAL		HYPOTHESIS TEST			EXP(B)	95% WALD CONFIDENCE INTERVAL FOR EXP(B)	
			Lower	Upper	Wald Chi-Square	Df	Sig.		Lower	Upper
<b>Employment Sector</b>										
4 Wholesale	1.876	.4726	.950	2.803	15.765	1	.000	6.530	2.586	16.490
3 Retail	1.092	.5031	.106	2.078	4.714	1	.030	2.981	1.112	7.992
2 Education	.515	.5670	-.596	1.626	.825	1	.364	1.674	.551	5.085
1 Health	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.

In addition to the tables there are four dotplots, which have plotted on them the odds ratios and their corresponding intervals to give a visual aid for interpreting the model output.

### 8.4.7 Interpreting the dotplots

The category labels on the y-axis are in the same order as the SPSS output. The blue x is the means odds ratio and the dashed line with two bars is the 95% confidence interval (CI) of the odds ratio. The point at the bottom of each plot is the reference category, this has an odds ratio of 1 and does not have a CI. A red line is also drawn on each plot. This is the  $x = 1$  and allow the reader to easily see if the CI contains 1. If it does then the effect of that particular category relative to the reference category is not significant at the 5% level. The dotplot below, figure 51, displays the odds ratios and confidence intervals for employment sector.

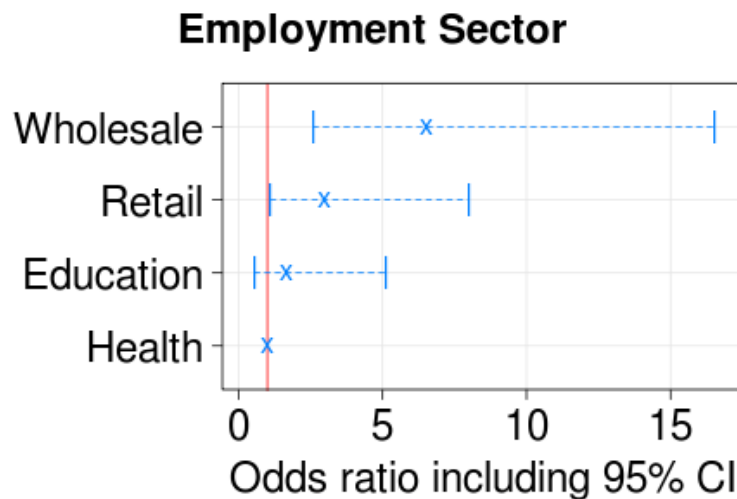


Figure 51: A dotplot displaying the odds ratio and corresponding 95% Confidence Interval for the employment sector categories. The red line represents = 1. Nb. Health is the reference category

Wholesale has an odds ratio of 6.53, with a 95% confidence interval of (2.59, 16.49) and is significantly different than Health at the 5% level (p value 0.001)

Retail has a means odds ratio of 2.98 with a 95% confidence interval of (1.11, 7.99) and is significantly different than Health at the 5% level (p value 0.030).

Education has a mean odds ratio of 1.67 however it is not significantly different from Health at the 5% level (p value 0.364)

### 8.4.8 Context and anger expression and suppression

The table below displays the results for context and the odds of expression.

Table 27: The parameter estimates for context

Name of Parameter	B	STD. ERROR	95% WALD CONFIDENCE INTERVAL		HYPOTHESIS TEST			EXP(B)	95% WALD CONFIDENCE INTERVAL FOR EXP(B)	
			Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper
<b>Context</b>										
Student/Pupil	2.660	.8910	.914	4.406	8.914	1	.003	14.298	2.494	81.967
Other	1.364	1.0186	-.633	3.360	1.793	1	.181	3.911	.531	28.800
Patient	1.150	1.0306	-.870	3.170	1.244	1	.265	3.157	.419	23.798
Subordinate	.620	.8434	-1.033	2.272	.540	1	.463	1.858	.356	9.703
Coworker	.312	.7366	-1.132	1.756	.180	1	.672	1.366	.323	5.789
Superior/Manager/Supervisor	.278	.7297	-1.152	1.709	.146	1	.703	1.321	.316	5.521
Customer/Client/Supplier	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.

The odds of expressing when the offender is a superior, manager, supervisor or coworker is almost one and a half times that of when the offender is a client, customer or supplier. When the offender is a subordinate the odds of expressing are almost twice that of when the offender is a client, customer or supplier. This increases slightly when the offender is a patient with the odds of expressing just over three times that of when the offender is a customer, client or supplier. The odds of expressing increase considerably more when the offender is a student or pupil and is almost fourteen and a half times that of when the offender is a customer, client or supplier.

The dotplot below, figure 52, shows that only the effects for student/pupil are significantly different from the reference category customer, client or supplier with the p-value of 0.003 and a 95% confidence interval of (2.50, 81.97).

However, all other variables within the category of context/relationship with offender, are not significantly different from the reference category at the 5% level

### Relationship with the Offender

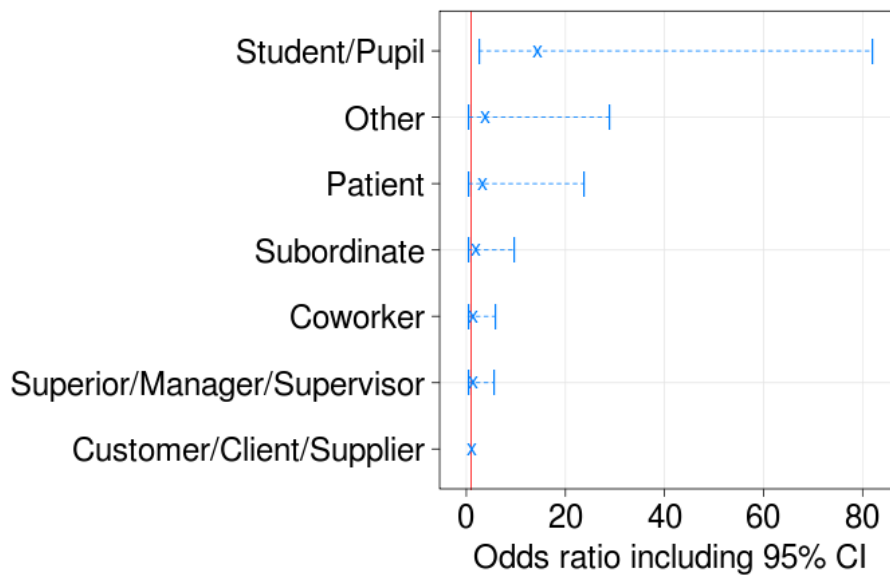


Figure 52: A dotplot of the odds ratios for the relationship with the offender categories in reference to customer/client/supplier (the reference category).

### 8.4.9 Causes of anger and expression and suppression

Table 28 below displays the causes of anger and odds of expression.

Table 28: Parameter estimates for cause of anger

Name of Parameter	B	STD. ERROR	95% WALD CONFIDENCE INTERVAL		HYPOTHESIS TEST			EXP(B)	95% WALD CONFIDENCE INTERVAL FOR EXP(B)	
			Lower	Upper	Wald Chi-Square	Df	Sig.		Lower	Upper
<b>Cause of Anger</b>										
Disrespect	3.145	1.0057	1.174	5.116	9.778	1	.002	23.218	3.234	166.693
Unjust Treatment	2.915	1.0947	.769	5.060	7.090	1	.008	18.446	2.158	157.661
Unprofessional Behaviour	2.882	1.1837	.563	5.202	5.930	1	.015	17.858	1.755	181.702
Powerlessness	2.776	1.3817	.068	5.484	4.037	1	.045	16.057	1.070	240.882
Humiliation Jealousy	2.567	1.1154	.380	4.753	5.295	1	.021	13.020	1.463	115.889
Job Incompetence	2.284	1.0544	.217	4.350	4.691	1	.030	9.814	1.243	77.512
Lack of Support/Being Ignored/Absence of Recognition	2.172	1.1420	-.066	4.411	3.619	1	.057	8.779	.936	82.317
A Repetitive Problem	1.944	1.1294	-.269	4.158	2.963	1	.085	6.987	.764	63.917
Mismanagement	1.907	1.0673	-.185	3.998	3.191	1	.074	6.730	.831	54.512
Immoral Behaviour	1.813	.9833	-.115	3.740	3.398	1	.065	6.126	.892	42.089
Lack of Team Work	1.159	1.2409	-1.273	3.591	.872	1	.350	3.186	.280	36.273
Poor Communication	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.



The table above shows the odds of expressing for each of the categories in causes of anger. The odds of expressing when the cause of anger is lack of team work are three times that of when the cause of anger is poor communication. This increases considerably more when the cause of anger is disrespect when the odds of expressing are over twenty three times that of when the cause of anger is poor communication. The dotplot below, figure 53, illustrates the odds ratios and confidence intervals for cause of anger.

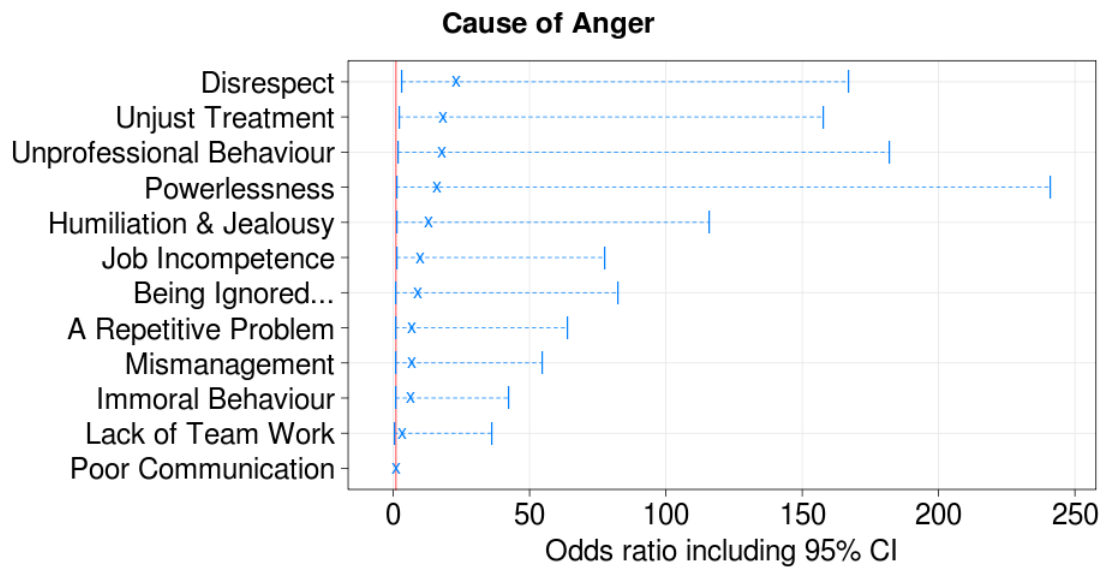


Figure 53: A dotplot displaying the odds ratio and corresponding 95% confidence interval for each of the cause of anger categories. The red line represents the  $= 1$ . Nb. poor communication is the reference category

The dotplot shows that the effects for disrespect are significantly different from the poor communication with the p value of 0.002 and a 95% confidence interval of (3.23, 166.69)

The dotplot shows that the effects for unjust treatment are significantly different from poor communication with the p value of 0.008 and a 95% confidence interval of (2.16, 157.66)

The dotplot shows that the effects for unprofessional behaviour are significantly different from poor communication with the p value of 0.015 and a 95% confidence interval of (1.76, 181.70)

The dotplot shows that the effects for powerlessness are significantly different from poor communication with the p value of 0.045 and a 95% confidence interval of (1.07, 240.88)

The dotplot shows that humiliation and jealousy are significantly different from poor communication with the p value of 0.021 and a 95% confidence interval of (1.46, 115.89)

The dotplot shows that job incompetence is significantly different from poor communication with the p-value of .036 and a 95% confidence interval of (1.24, 77.51)

All other categories within the variable of cause of anger are not significant.

#### 8.4.10 Stress, JDI Work and JDI People and anger expression and suppression

Table 29 below displays the results for stressed, JDI work and people and odds of expression

Table 29: Parameter estimates for influences and job satisfaction

Name of Parameter	B	STD. ERROR	95% WALD CONFIDENCE INTERVAL		HYPOTHESIS TEST			EXP(B)	95% WALD CONFIDENCE INTERVAL FOR EXP(B)	
			Lower	Upper	Wald Chi-Square	Df	Sig.		Lower	Upper
<b>Influences</b>										
Already Stressed	-.158	.0562	-.268	-.048	7.893	1	.005	.854	.765	.953
<b>Job Satisfaction</b>										
JDI Work	.041	.0163	.009	.073	6.422	1	.011	1.042	1.009	1.076
JDI People	-.068	.0175	-.102	-.034	15.224	1	.000	.934	.903	.967
Scale	1									

#### 8.4.11 Influences of anger incident

##### *Already stressed*

The covariate stressed has an Exp (B) value of 0.854 with a p value of 0.005. From this it can be said that for each unit increase in disagreement (1 = strong agreement, 9 =

strong disagreement) the odds of expressing compared to suppressing increase by 0.854. In this case as the number is less than 1 this works out to be a decrease. The higher the stress score the less stressed people felt before the anger incident. The .854 tells us as the stress score increases, the odds of expressing decrease and the odds of suppression therefore increase. This indicates that the more stressed someone agrees they felt before an incident, the larger the odds of expression and the less an individual agrees with the notion that they felt stressed before hand, the larger the odds of suppression.

### ***Job satisfaction: Work***

The covariate JDI Work has an Exp (B) value of 1.042 with a p-value of 0.011. From this it can be said that for each unit increase in the JDI Work scale the odds of expressing compared to suppressing increase by a factor of 1.042. This indicates that the more someone is satisfied with aspects of their Work the more likely they are to express their anger and the less likely they are to suppress their anger.

### ***Job satisfaction: People***

The covariate JDI People has an Exp (B) value of .934 with a p-value of 0.001. From this it can be said that for each unit increase in JDI People scale the odds of expressing compared to suppressing increase by .934. As with stress above, this actually works out to be a decrease, as .934 is less than 1. The higher the JDI People score the more satisfied a person is with the people they work with. This indicates that the more someone is satisfied with the people they work with (i.e. the JDI People score increases) the odds of expressing decrease and the odds of suppression therefore increase. Therefore, participants are more likely to suppress their anger and the less likely to express their anger.

## **8.5 MODEL FOR THE EXPRESSION AND SUPPRESSION OF ANGER**

### **8.5.1 Test of Model Effects**

Figure 54 below reflects the findings from the Test of Model Effects and illustrates what factors and covariates are important in predicting whether or not someone expressed or suppressed their anger.

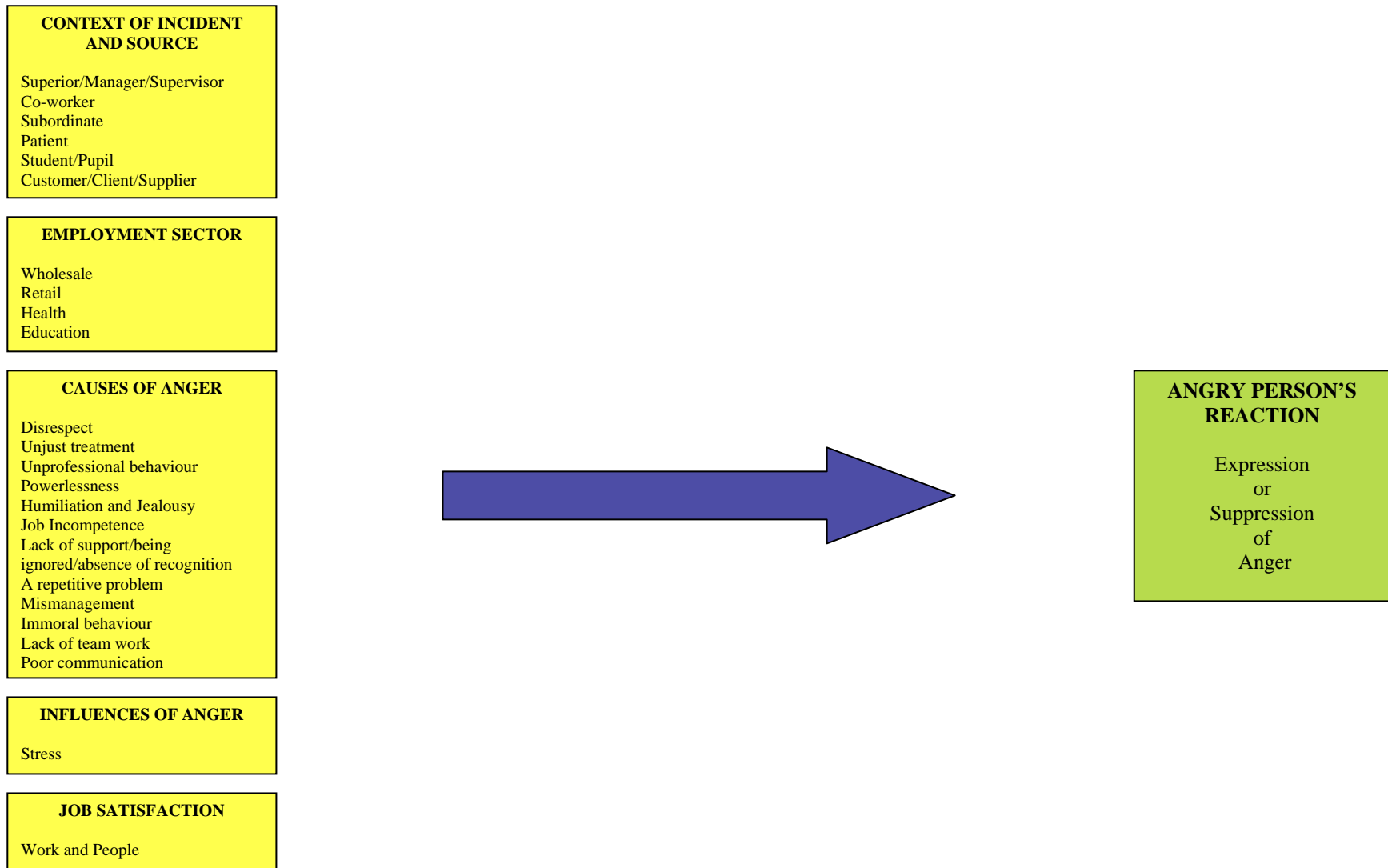


Figure 54: Final model illustrating predictors of expression and suppression of anger

## **8.6 DISCUSSION**

A discussion of the results found in part two follow. The Test of Model Effects shows that the context (i.e. relationship with the offender) and source, employment sector, the cause of anger, being stressed prior to an anger incident and levels of satisfaction with work and coworkers are important in predicting whether or not someone will express or suppress their anger while the output for the model, the parameter estimates table, shows exactly where the real differences are. These differences are discussed in greater detail below.

### **8.6.1. Context of incident, source and expression of anger**

Firstly, context and source were shown to be associated with the expression of anger. More specifically the results show that participants were more likely to express anger if the offender was a student or pupil. The odds of expressing anger when the offender is a student or pupil, and thus an external source, is ten and a half times that of when the offender is a customer, client or supplier which is also significant at the 5% level. This is inconsistent with previous research which has shown that people are less likely to express their anger when the offender is an external source such as a customer (Grandey et al, 2002; Ravid et al. 2009). However, these findings may be due in part to the way angry people perceived the offender. It could be that students and pupils are not perceived as external sources by the angry person, rather they may be perceived as subordinates to the angry person. If students and pupils are perceived in this way, then this could possibly account for the extent to which angry people express anger to students and pupils. As previous research has shown, angry people who hold a higher status than the offender are more likely to express anger and use anger as a tool in which to influence the offender (Ravid et al. 2009; Miron-Spektor and Rafaeli, 2009).

Alternatively, the display rules in the education sector could be that expression of anger is expected in order to control pupils. It could be that teachers for instance have to or are allowed to express their anger in order to control unruly children. Finding out why expression seems to be so evident in this sector when the offender is a student or pupil could be investigated in future research.

Participants in this study were almost four times as likely to express their anger when the offender was a patient, also an external source. Although this was not a significant effect it is providing evidence to suggest people are not suppressing their anger externally, specifically with students and patients. As with students and pupil, it could be that workers do not actually consider pupils as an external source and rather see pupils as subordinates. Hence angry people may feel freer to express their anger without repercussions. Furthermore, the display rules again may have an influence in the health sector which allow for employees within this sector to display their anger to patients. Perhaps the culture within the health sector of 'zero tolerance' of anger and aggression from angry patients has allowed the reversal of behaviours to occur against the patients. The exploratory data show that the expression of anger to patients seems quite frequent, whereas suppression of anger from colleagues at all levels is quite high. This may suggest that the norms and display rules for colleagues is to keep organisational harmony within the health sector. However, with patients, workers may feel the need to express anger to keep unruly patients under control just as teachers may express anger to keep unruly children under control. As with the education sector, perceptions of how employees perceive patients could be explored in future research.

### *Expression and external and internal source*

Furthermore when the angry person was angered by anyone other than a student or pupil this did not lead to a significant effect. However, when examining the odds ratios internally (i.e. anger expression between colleagues and supervisors) in this study they were still in the direction that would be expected from previous research (Fitness, 2000; Ravid et al, 2009) which suggests that expression of anger exists among colleagues and supervisors. For instance, when the offender was a superior, manager or supervisor, participants were just over one and a half times as likely to express their anger than if the offender was a customer, client or supplier; participants were almost twice as likely to express their anger when the offender was a coworker than if they were a customer, client or supplier, and participants were over three times as likely to express their anger when the offender was a subordinate. So once more, it seems that expression of anger is influenced by the context of the anger incident.

### **8.6.3 Employment sector and expression of anger**

Significant effects were found for the wholesale sector and the retail sector and the expression of anger. An examination of the data shows that workers in the wholesale sector were 6 and a half times more likely to express anger than those in the health sector, while those in the retail sector were almost 3 times more likely to express anger than those in the health sector. Although not significant, participants in the education sector were 1 and a half times more likely to express their anger than those in the health sector.

It is not known why there are such differences in anger expression between the employment sectors. It is only speculative that these findings could be due in part to the norms or display rules within these sectors as no measure on of the culture or norms for the different sectors was taken. Therefore, no association can be made. However, future research could tackle this area and try to find out why expression of anger differs between sectors and if this is associated to culture and norms of the organisation.

### **8.6.3 Cause of anger and expression of anger**

The present research demonstrated the importance of the cause of anger on expression of anger, especially the importance of disrespect, unjust treatment, unprofessional behaviour, powerlessness, humiliation and jealousy and job incompetence with how the participant reacted. In particular it showed that when the causes of anger involved one of these, participants were significantly more likely to express anger.

The results also show that other's job incompetence was nearly eight times as likely to make participants express anger than when the cause of anger was poor communication; other people acting in an unprofessional manner was almost nine times as likely to make participants express anger than when the cause of anger was poor communication; when participants felt humiliated or jealous they were ten times as likely to express anger than when the cause was poor communication; when the cause was unjust treatment or disrespect, participants were fourteen times as likely to express anger than when the cause was poor communication and finally when the cause of anger was powerlessness participants were fifteen times as likely to express anger than when the cause of anger was poor communication. These findings also suggest that when the

cause of anger involved one of the above, then the participant was less likely to suppress their anger. Furthermore, lack of teamwork, immoral behaviour, mismanagement, a repetitive problem, lack of support, being ignored and absence of recognition, although in the Test of Model Effect, are not significant predictors of expression of anger. It is interesting to see that immoral behaviour, one of the most common causes of anger in previous research (Fitness, 2000) is in this list. The odds ratio for this cause is quite low compared to the other causes. This could suggest that participants were also suppressing anger to some degree as well when the cause of anger was one of these causes of anger.

#### **8.6.4 Influences of anger and expression of anger**

##### ***Stress***

Significant effects were found for stress and expression of anger. This provides evidence for AET in that work environment features, possibly a stressful environment, may have an effect on angry reactions. It is also consistent with the findings from study one, and provides evidence to support the model developed by the researcher, which proposes that stress is an influence on people's experience of anger. In this case, it can be seen that the more someone feels stressed at work the more likely they are to express anger. At the same time, the less likely a person is to feel stressed at work the more likely they are to suppress their anger. These findings could be interpreted in two different ways. It could be suggested that expressing anger is not good for the individual or for the organisation. Employers would not want employees to express their anger to customers and lose their custom, nor would they want them to express their anger to colleagues and affect their relationships with colleagues. However, the results also show that people who are less stressed are less likely to express their anger and more likely to suppress their anger. Suppressing anger is no doubt beneficial for the organisation but it is not good for the person doing the suppressing (Mann, 1999; Leineweber et al. 2009). In the long run, the organisation is likely to pay the price for suppression of anger through the individual suffering from burnout and the organisation suffering from absenteeism or high turnover rates (Ravid et al. 2009). Therefore, the aim would be to prevent stress at work and teach people how to deal and cope with stress appropriately.



### *Job satisfaction: work and people*

The present study found that work and people were the two aspects of job satisfaction that were associated with anger expression. Levels of satisfaction with participants' work indicated that the more an individual was satisfied with their work the more likely they were to express their anger and the less likely they were to suppress their anger. This was in contrast to levels of satisfaction with people. The study found that the more an individual is satisfied with the people they work with the more likely they are to suppress their anger, and the less likely they are to express their anger. Perhaps if people are satisfied with the people they work with, they do not want to ruin the good relationship they may have with them by expressing their anger to them. In effect, these individuals may want to keep relationship harmony (Thomas et al. 1998) as expressing anger may make the individual anxious and add to the stress of what could be an already tense situation.

These findings provide further support for AET in that affective reactions are associated with job satisfaction. However, in the theoretical model job satisfaction is placed at the end of the model. Alliger and Williams (1996) propose that with the levels of experience (i.e. immediate, short-term and long-term) causality should not be assumed to be only one way, and suggest that global judgements and cognitions, such as job satisfaction measures may affect immediate experience and short-term perspectives on that experience. Hence the job satisfaction levels could be influencing the expression of anger, as well as the experience and expression of anger affecting job satisfaction.

It also provides support for the researchers own model which proposes that angry reactions, such as expressing and suppressing anger are associated with job satisfaction. Similarly, previous research suggests that anger is related to job satisfaction (Gibson and Barsade, 1999; Fisher, 2002b). However, what this research does explore, is exactly where the associations are in relation to the different aspects of job satisfaction. This is particularly helpful in identifying the features of people work which are related to expression or suppression of anger.

### *Trait anger not a significant predictor of expression or suppression of anger*

The findings that there were no significant associations with state and trait anger suggests that both state and trait anger have no effect on the expression and suppression of anger in this present study. This is inconsistent with previous research (Fox and Spector, 1999) which has suggested that trait anger is related to the frequency of experiencing anger. Furthermore, it does not provide evidence for the researcher's own model which proposes that trait anger will have an effect on expression and suppression of anger. AET also proposes that individual differences in dispositions have an effect on affective reactions. However, this study does not provide evidence for this association.

The finding that there was no association may be in part due to the measures used. Boddeker and Stemmler (2000) have looked at the inconsistent results of habitual anger responses (e.g. trait anger on response styles) and proposed firstly, that questionnaires had seldom been validated through observations of the actual anger response processes. Secondly, they propose that the relationship between a trait variable and actual reactivity can only be expected under certain conditions, and that trait variables do not express themselves in every situation. Hence, it could be that the situation in which the anger incident took place in had more of an influence over the reaction of anger than a person's trait anger. As previously mentioned, people adjust their emotion displays to the context, or as Ekman (1972, as cited in Ravid et al. 2009) proposes, the contexts determines which emotions may be displayed when and to whom. Furthermore, emotional labour requirements are also determined by situational characteristics (Tschan et al. 2005) thus emotional display rules are contingent on the specific characteristics of different situations too.

Furthermore, Boddeker and Stemmler (2000) found that actual anger components (i.e. physiological, behavioural and cognitive components of anger) related differently to anger-in, anger-out and anger control in different studies. Boddeker and Stemmler (2000) therefore suggest that new measures of anger response styles should take in account the three anger response components, and further highlights the importance of taking different situational backgrounds into account, as well as trait variables when predicting behaviour. Furthermore, Boddeker and Stemmler (2000) suggest that studies assessing the relationship of more global personality traits of extraversion and

neuroticism to emotional experience have yielded more consistent results than the STAXI on anger-out, anger-in and control. Extraversion has consistently been related to less reactivity in negative emotions and neuroticism has consistently been associated with self reports of negative emotions.

Jack (2001) also proposes that the context is not taken into account in studies of anger and suggests that the most critical factor which affects anger's arousal and expression is the interpersonal context. This has been further illustrated by Martin and Watson (1997 cited in Jack, 2001) who found that diary entries over 7 days of anger episodes and in particular the expression of anger were unrelated to participants' anger out scores on the AX scale. Jack (2001) proposes that anger scales trivialise the interpersonal context of anger's origin and effects and ignores the determinants that affect anger expression and suppression, such as power and norms, which may influence expression and instead looks at the interpersonal context in terms of how likely an individual is likely to respond with expression or suppression of anger.

Therefore, future studies investigating anger could look at personality traits instead of measures of state and trait anger to predict reactions to anger and as suggested the context and situational background should be taken into account too.

#### ***Gender not a significant predictor of expression or suppression of anger***

Gender did not predict expression or suppression of anger in this study. Past research has produced conflicting evidence for sex differences on measures of anger and it is proposed that this is down to the way males and females are regarded. For instance, Milovchevich, Howells, Drew and Day (2001) provided evidence to suggest that males and females do not differ significantly in their experiences and expression of anger. However, Milovchevich et al. (2001) did find that participants' anger experience and expression differed depending on whether the participant adopted a masculine or feminine role. Participants who adopted a masculine gender role reported higher levels of trait anger and outward anger expression and were rated lower in anger control. Feminine counterparts expressed lower levels of trait anger, expressed anger inwardly and exercised higher levels of control. Androgynous participants reported higher levels of trait anger, outward anger expression and greater anger control.

Milovchevich et al. (2000) state that the results of the study highlight the importance of looking at gender role, as opposed to sex per se, when looking at anger management programmes. Furthermore they state that people respond to anger eliciting situations using gender schemas and that a masculine individual may respond with more outward expression and intensity while a feminine individual may learn to control their anger experience and expression, because they have to or have learned to have to from experience and societal norms. Hence it may not be enough to ask someone if they are male or female but rather to assess their masculinity and femininity when trying to predict the experience and expression of anger.

## CHAPTER 9

### GENERAL DISCUSSION

#### 9.1 SUMMARY AND DISCUSSION OF MAIN FINDINGS

The discussion is separated into sections. Section one summarises the main findings from study one: the interviews and study two: the anger diary, and includes the findings from the exploratory results, the test of model of effects and parameter estimates table. Section two discusses the limitations of the research overall. Section three offers recommendations for future research followed by section four which discusses the management of anger at work and presents the overall conclusions.

##### 9.1.1 The main findings from study one and study two

###### *Influencing factors of the occurrence of anger*

One of the main findings from study one: the interviews was that participants believed that certain factors influenced the occurrence of anger. Thus, participants who perceived that feeling stressed or being in a bad mood prior to an anger incident, letting anger accumulate over time or feeling inadequately trained to deal with anger, seemed to have an effect on the occurrence of anger incidents. However, the results from study two: the anger diary showed that only stress had an influence on the expression of anger, whereas being in a bad mood prior to the anger incident, the accumulation of anger over time and feeling inadequately trained to deal with anger did not seem to play a part.

###### *Causes of anger*

Study one: the interviews enabled the researcher to compile a list of the most common anger eliciting incidents that people tended to experience at work. Overall the causes of anger were similar to those found in previous research, such as, others' immoral behaviour, being unjustly treated, others' job incompetence, being treated with disrespect, a lack of support from others and being humiliated. However, the results

from study one: the interviews also showed that there were other events which could possibly lead to anger, for example, poor communication, being ignored, a lack of teamwork, jealousy and others' unprofessional behaviour. Study two: the anger diary then enabled the researcher to delineate which of these causes of anger were most likely to lead to expression of anger (see section 9.1.3 below).

### ***Frequency, intensity and duration***

The results from study one: the interviews also suggested that anger was experienced on a regular basis, that it was felt intensely and could possibly last for a long time. Study two: the anger diary however suggested that anger was not experienced too frequently. This could however be due to the very different methods used to collect data on anger incidents in both studies.

### ***Expression and suppression of anger***

In addition, both studies showed that anger was expressed in a variety of ways, for example, in a verbal manner or a non-verbal manner, using body language or physical aggression. Alternatively, anger was also suppressed, and at such times some participants spoke of performing emotional labour whereby they faked the expression of another emotion while suppressing their anger.

### ***Short and long-term consequences of anger***

Study one: the interviews also enabled the short and long-term consequences of anger to be identified. Although these were not analysed in study two: the anger diary, the initial results show that the behavioural and emotional reaction to anger, both in the short and long-term should not be ignored as they could potentially lead to negative consequences both for the angry person, the offender and the organisation. For instance, although the short-term consequences of anger involved some participants taking constructive steps to try and resolve the situation or others taking it upon themselves to take legitimate punishment out on the offender, many of the participants chose to take out illegitimate punishment on the offender. Additionally, in some incidences, the participants felt that the anger incident affected their work output, or they felt that it affected others around them while in some incidents participants emotionally withdraw from the offender.

As well as the short-term consequences of anger, participants often experienced constituent emotions of short-term anger incidents, such as feeling better for expressing anger or alternatively feeling upset. However, participants did state that social support from colleagues or family and friends helped them recover from the anger incident much more quickly than if they had not received it. Also, perceiving that the incident had been resolved helped the angry person to recover from the incident much more quickly too.

However, what was particularly noticeable in study one: the interviews was that long-term anger tended to lead to particularly dire consequences for the individual. As a result, many of the participants who spoke of long-term anger also described feeling constantly upset following an incident, dreading going to work, feeling depressed or stressed, losing their confidence and feeling disillusioned and less inclined to work.

In addition, feeling this way often led to poor health. Participants in some cases spoke of how experiencing long-term anger led to them taking time off work to recover from 'break downs'. Some participants needed to visit their GP to address the symptoms of their long-term anger whereas some participants felt they needed counselling as a result of their long-term anger.

Moreover, participants spoke of how they would end up taking their anger home with them. Consequently, they would often take their anger out on their family members or their partners. This, in turn, would put pressure on their relationships outside of work, even when the cause of the problem may have initially stemmed from anger incidents occurring at work.

Also, with regards to the long-term consequences of anger, the negative effects of it seemed to be ubiquitous. So, where past research may have led us to believe that long-term consequences of anger may only be experienced by those in less powerful positions, the results from study one: the interviews tended to show the contrary or rather study one showed that long-term consequences of anger can be experienced by employees regardless of their position. Hence, the belief that those who hold non-managerial positions suppress anger and harbour grudges long after an anger incident has occurred, may also apply to managers although their motives may differ. Non-

managers may not express anger for fear of losing their job; however, employees in managerial positions may just feel more isolated and less unable to obtain the social support from colleagues. They may also feel that they ought to be able to deal with their anger, possibly because of their position within an organisation, when in actual fact they may be the person less equipped to deal with their anger more so than others. This could possibly explain why the participants in study one: the interviews who held managerial positions and experienced long-term anger suffered so badly from the long-term consequences of anger. More research is definitely warranted in this area to discover how anger has an effect on individuals, at all levels, in the long-term.

So what was predominantly clear from the results in study one: the interviews, was that the short-term and long-term consequences could be potentially unpleasant in many cases for participants. However, due to the time limits of the study, short and long-term consequences were not addressed further. However, it is important to recognise that the short, and may be even more so the long-term consequences of anger incidents, may be something which could be seriously damaging to all involved if they are to be continually overlooked.

### **9.1.2 Employment sector and expression**

The results show that the employment sector is important in predicting whether or not a person will express or suppress anger. As the exploratory results show, most anger incidents are experienced in the health and education sector, yet the expression of anger is more likely to take place in the retail and wholesale sector. Furthermore there is a fairly broad spread of causes of anger in both these sectors. However, immoral behaviour, unjust treatment, job incompetence and disrespect seem to show up for both sectors quite frequently. Nonetheless, causes of anger expression show that disrespect, job incompetence and unjust treatment are the causes most likely to end up in expression of anger in the retail and wholesale sector. Perhaps these sectors need to concentrate on these three causes specifically and train employees on how to deal with such anger incidents. Further examination of the exploratory results suggests that the behaviour most frequently engaged in within the retail and wholesale sectors is verbal abusive behaviours and participants less frequently engaged in verbal non abusive behaviour and body language. Taken together, these findings suggest that participants for some reason may feel freer to express anger in the retail and wholesale sectors.



### **9.1.3 Causes of anger and expression**

Overall, and regardless of context, source or sector, the results show that being angered by disrespect, unjust treatment, unprofessional behaviour, powerlessness, humiliation and jealousy and job incompetence is more likely to lead to expression of anger. The exploratory results also show that a large number of incidents are caused by disrespect and unjust treatment, which is mainly within the health sector. Figures for powerlessness are low but also occur mainly in the health sector, as do humiliation and jealousy and job incompetence. In the education sector, a large numbers of incidents are also caused by disrespect followed by unprofessional behaviour and job incompetence. In the retail sector, unjust treatment tends to be the most common cause of anger followed by job incompetence and disrespect, and in the wholesale sector the most common cause of anger is job incompetence followed by disrespect.

These findings not only show that there is a variety of events which cause anger but that these causes vary considerably between sectors. Furthermore, the results show that different events may lead to the expression of anger. The reasons for this are unknown at this stage. There may be a multitude of reasons why this is so. The events that cause anger could be influenced also by the norms, situational characteristics of the situation and the personality of the individual. Further work needs to be carried out to investigate this area. However, in terms of anger management it would seem apparent that ‘one size fits all’ would not be appropriate when trying to reduce anger in different sectors.

### **9.1.4 Context, source and expression of anger**

The results show that context and source is important in predicting whether or not a person will express their anger. For instance, being angered by a student or pupil is more likely to make the angry person express their anger. Also, the exploratory results showed that when participants were angered by a student or pupil a large number of participants responded by using verbal abuse as opposed to non verbal abuse. So, it could be the, case that if managers do not want their employees to express their anger to students or pupils that they need to work on reducing and preventing events which lead to the experience and expression of anger.

The findings that there were significant effects for context and source, and in particular the finding that the expression of anger is more likely to take place towards a student or pupil, may be due as already said to the perception that teachers, or tutors and lecturers have of pupils. Alternatively it could be the display rules within education that allow for such expressions of anger. However, although research (Gibson and Callister, 2010) on the expression of anger have found that anger can have positive outcomes (i.e. achieving personal goals) research has also shown that the expression of anger can have particularly negative consequences such as deterioration in coronary health (Robins and Novaco, 2000). Therefore, teachers, tutors and lecturers could be a group particularly vulnerable to the negative consequences related to the expression of anger, instigated by students and pupils, and may need further attention in order to investigate the reasons behind this.

#### **9.1.5 Job satisfaction and expression and suppression of anger**

Finally, feeling satisfied with work is associated with the expression of anger and feeling satisfied with people at work is associated with the suppression of anger. Firstly, with regards to the people participants worked with, the more someone was satisfied with the people they worked with the more likely they were to suppress their anger and the less likely they were to express their anger. This is inconsistent with Tschan et al. (2005) who states that the relationships between coworkers are based on long-term relationships and honesty. Therefore, the authenticity of emotional expression is expected, which is more likely to include the expression of authentic emotions rather than the suppression of anger. Nonetheless, it could be that the satisfaction with the people that participants work with is actually helping to prevent the expression of anger. Workers may feel that they can not ruin their relationship with these people because they have to work with them every day, and they want to keep relationship or organisational harmony. As a result, workers may then suppress their anger because they do not want to 'rock the boat'. However, research from emotional labour has shown that suppressing anger may carry with it negative consequences such as burnout and lowered well-being (Grandey, 2000; Holman, et al. 2002). Furthermore, over time, suppressed anger may turn into hate or other emotions and lead to detrimental consequences for the individual and the organisation (Fitness, 2000). If this is the case, helping workers to improve relationships between coworkers may soften the anger

experience for the individual and anger management training can teach them how to control their anger, teach them how to deal with it, and others better.

Secondly, when people were satisfied with their work they were more likely to express their anger. This could be because they feel comfortable enough in their environment to be able to express their anger and possibly their expression of anger is a reflection of how much they are committed to their work. Nonetheless, it could also suggest that people who are satisfied with their work are so because they feel able to express their anger and may not suffer the negative consequences of suppressing anger. However, it is not known the effect this expression of anger has on the people around them. This group of people may feel happy enough at work to express their anger, but they may be unaware that they are making everyone else around them miserable.

## **9.2 LIMITATIONS OF PRESENT RESEARCH**

The limitations of the study will first deal with those from study one: the interviews followed by the limitations from study two: the anger diaries.

### **9.2.1 Study one: the interviews**

#### ***Underestimation of the time taken to carry out study one***

One of the major stumbling blocks of study one: the interviews was the actual time it took to carry out the recruitment of participants for the interviews, the one to one interviews with the participants, the transcription of interviews and the qualitative analysis. The researcher had greatly underestimated the time it would take to carry out these procedures and they took a lot longer to accomplish than first expected.

In addition, organisations were very reluctant to take part in the research. One possible reason for this is that studies which involve interviews and ESM use very intrusive methods and are considerably time consuming. Again, the researcher underestimated how long it would take to gain permission from organisations to carry out research and the time taken to eventually recruit participants from within those organisations. The outcome of these setbacks was that the researcher was not able to spend as much time on collecting data in study two: the anger diary.

### ***Trustworthiness of findings***

In addition to the limitations of study one: the interviews with regards to time, other limitations involved the trustworthiness of the research findings. It is said that research findings should be as trustworthy as possible (Graneheim and Lundman (2003), and every research study must be evaluated in relation to the procedures used to generate the findings. The use of concepts for describing trustworthiness differs between the qualitative and quantitative research traditions. Quantitative research tends to use validity, reliability and generalisability whereas in qualitative research the concepts of credibility, dependability, and transferability tend to be used to describe various aspects of trustworthiness. These are described further below in relation to how they were used in the current study.

#### **Transferability and credibility**

This refers to the extent to which the findings from study one: the interviews can be transferred to other groups. It is hoped that as the researcher has provided information on participants' characteristics and provided excerpts from the interviews that the reader can make their own decision about the transferability and credibility (i.e. how well categories and themes cover the data) of the findings to other contexts. However, in this case, the credibility of the findings may be questionable as the researcher was the only individual in contact with the interviewees. The use of one interviewer can be considered less than ideal, in that it may allow personal biases about information that is attended to to creep in, and areas may be explored mistakenly in further detail. Preferably a team of researchers would help to prevent the personal biases of a lone researcher from being attended to.

#### **Dependability**

As data from the interviews were collected over time, there was a risk of inconsistency during data collection. Thus, it was important to question the same areas for all participants. However, as Cassell and Symon (1999) state interviewing is said to be an evolving process during which the interviewer obtains new insights into the topic of interest, which can subsequently influence future questioning in interviews. Thus, discussion with a research team could have helped the researcher make judgements about similarities and differences of the content of questioning, and whether it was

consistent over time. Furthermore, the analysis of the transcripts and labelling of the categories, sub-categories and themes was also carried out and checked by one researcher. Ideally, future research would use more than one researcher to code the same transcripts, and use inter-rater comparisons for the categories and themes identified.

### **9.2.2 Study two: the anger diaries**

With regard to the anger diaries, there were a number of limitations associated with the anger diary used in the PhD. These are mentioned below.

#### ***The complexity of the model***

In this present study the author was able to develop a theoretical model of workplace anger which specifically focused on the causes, characteristics and short and long-term consequences of workplace anger. The model which was based on Affective Events Theory, the limited research on workplace anger and the categories, sub-categories and themes developed from the one to one interviews, led to the development of an anger diary. This anger diary has been used to gather information on anger incidents using experiencing sampling methodology, in particular an event contingent approach. This has subsequently resulted in information about anger incidents being collected in real time and has subsequently provided a more accurate picture of anger incidents at work.

However, the development of the model was an extremely lengthy process. It began with a conceptual framework, which following the interviews, led to the preliminary theoretical model, which included all the variables identified from the interviews and previous research. This in turn led to a causal model, which involved using all the variables from the preliminary model and illustrated how they could have an effect on other variables within the model.

The model developed in study one from the conceptual framework and interviews became extremely large and complex quite quickly. It became apparent that at this stage the researcher would not be able to collect data on all the variables within the model, especially on the long-term consequences of anger which would involve extending the time taken to carry out the research significantly. What is more, time

constraints meant that it was not possible to analyse the short-term consequences of anger incidents too: however, it was important to gather information on these at the time of the incident so they were left in the diary and this would allow for them to be analysed at a later date.

It also became evident that not only was there an enormous amount of variables to collect data on from different sectors and organisations but that each one of these variables would have to be analysed. Hence, the decision was made to reduce the amount of data that would be collected in study two: the anger diary. However, this still resulted in a rather large diary with a vast amount of questions for the participant to complete each time they experienced an anger incident. This could have easily led to many participants not wanting to complete the diary at all and as a consequence the return rate being rather low.

Thus, on reflection, although the researcher was eager to gather as much information as possible on anger, this eagerness and hunger for knowledge on anger may have possibly led to the loss of data on anger incidents. In addition, the size that the model grew to and its complexity, proved to be an obstacle for the researcher when designing the rest of the study, and trying to gather data on anger, instead of serving as a tool in which to understand anger and the part this emotion has to play at work.

### ***Self selection bias***

It is also recognised that the method of sampling used in this present study may have excluded those people who did not want to take part in the study because they felt they were too busy to fill out the diary. The study may have only included those people who felt that they were able to complete the diary because they thought that they would be able to find the time to do so. In addition, selection of participants for the study was sometimes left up to the H.R. department or management of the organisation. This could have possibly led to biases in the recruitment of participants.

### ***Random sampling could be a better alternative***

Although it is not clear what influence the selection methods in the current research may have had on the findings, it could be suggested that the people who felt they were too

busy to fill out the diary could have been the group who could have provided a significant contribution to understanding the experience of anger. Thus, the problems with sampling need to be recognised as a possible limitation of the research and may suggest that the results cannot be generalised to the working population as a whole.

### ***What happens to those organisations that do not want to be assessed?***

In addition, the organisations which have the most issues with anger may have been the organisations which did not agree to take part. This could be because they were completely unaware that they actually have any issues with anger or they do not want to reveal that they have any problems with anger within their organisation. Not including such organisations in the study could lead to an unrealistic picture of the nature and extent of anger at work. This highlights the need for more research to be carried out within many different organisations, and find ways to gather data on anger from organisations no matter what their outlook on the matter is. In this way, researchers can help to reveal the true nature and extent of the emotion of workplace anger more so than ever before.

### ***Good rapport***

Good rapport is said to be essential in studies which incorporate ESM, and as the anger diary was kept by participants over four working weeks, it was even more important that good rapport was maintained to ensure a good response rate. It was the intention of the researcher to carry out regular visits to organisations and establish good relationships with participants and organisations but realistically this was not possible with so many participants and organisations in so many different areas.

Initially, at the beginning of data collection, emails were sent out to participants to remind them to complete the diary. However, as the recruitment of more participants increased the researcher was unable to keep up with the participant contact. It is not known if this had a bearing on the response rate of the anger diaries, but it was noted that responses were greater at the beginning of the study than later on when the researcher was weighed down with the recruitment of more participants, collection of completed anger diaries, data input and analysis. Unfortunately, by not reminding

participants to complete the diaries and establishing a good rapport with participants could have resulted in participants forgetting to complete and return diaries.

### ***Problem with diaries: subjective forgetfulness***

One major problem with diaries is subjective forgetfulness and despite an instruction to fill out the diary sheets regularly and promptly participants do not always do this and data are lost. In addition, asking participants to record anger incidents no later than 24 hours after the incident initially runs the risk that data on anger incidents that lasted longer than this may have been lost. However, the researcher had to ensure that memory biases were limited. By asking participants to record any incidents later than a day may have resulted in the participants forgetting important information about the incident, or forgetting to complete a diary entry at all.

Conversely, the instructions to attend to interactions so that they may later be recalled may make participants unduly self-conscious and aware of their behaviour so that it comes disrupted or subject to strain (Ashkanasy et al. 2002). This is referred to as 'reactance', and it is possible that participants were more aware of the behaviour and either became angrier or less angry over the diary keeping period. Moreover, event-contingent recording has been criticized on the grounds that it "permits subjects to anticipate many of the behaviours that will be measured giving rise to a greater possible problem with behavioural reactivity" (Hormuth, 1986, pg 263 in Wheeler and Reis, 1991). The self reporting nature of the data collection require repeated responding on the same dimensions or scales, since repetition itself, and not the timing of that repetition, is what allows participants to anticipate the behaviours to be measured. Although participants were reminded to try and not let the diary impinge on their work life or alter their behaviour, it is not known how reactance influenced the anger incidents over the four week period.

### ***Measuring anger incidents subjectively***

There were also problems in attempting to measure anger incidents. Experiences of anger incidents were completely subjective. This can lead to a miscalculation in its occurrence. Perceptions of what offenders do to cause other people to become angry may not be accurate, and it may not be the intention of the offender to make participants



angry. The experience of the angry person is only part of the story and the experiences of the offender are also important. Comparisons of the perceptions of the angry person and the offender could highlight discrepancies in the results which provide evidence to suggest that either one is exacerbating the results. Alternatively, peer reports may be a solution. Although there are many difficulties with such methods of data collection they should not be excluded.

### ***The time spent with internal and external sources could have an impact on the results***

Job roles differ in the frequency that employees are expected to interact with customers, patients or students. A teacher may work with a student for hours, while a checkout operator may only interact with a customer for five minutes. Furthermore, job roles may have an effect on the time that an employee spends with colleagues. Thus, frequency and duration were situational factors which may have increased the likelihood that an employee experienced anger events and influenced how the anger event unfolded.

### ***End of diary questionnaire***

The end of diary questionnaire was only completed by a third of all participants who took part in the study. Therefore, there were quite a large number of participants who did not complete the end of diary questionnaire and provide an explanation as to why they did not complete the diary. Of those participant that did complete the anger diary, over half the anger diary period was not typical for them which could suggest they were reporting one-off incidents. However, it could be also that they had experienced less as opposed to more anger. Thus, the end of study questionnaire would have benefitted from asking more details about incidents.

### ***Anonymity***

Although participants were assured of anonymity they may still have been reluctant to disclose information on anger incidents. In the current study, participation was based on trust. However, if responsibility was placed on H.R. managers or managers and supervisors, then this trust or research alliance may not have been as strong (Waite et al. (1998). However, in this study, in order to gain access to a large number of employees the researcher felt it necessary and appropriate to reach participants through such

channels. In some organisations if managers were unaware of the anger diary then participants could be reprimanded for using it or would be more likely to fill it in after work when recall biases may start to ‘creep in’.

### *Difficulty in comparing findings with previous research*

Finally, with the lack of theory and empirical evidence on anger at work it has been difficult to compare the results with previous findings. Furthermore, the research was conducted with a relatively small non-randomised sample. Therefore, the results cannot be generalised and can only be transferred to those groups the reader determines as closely representing the participant groups. Hopefully though, this study has provided a starting point for other researchers wishing to delve deeper into this area.

## **9.3 FUTURE RESEARCH**

The research in this study not only adds to the literature on anger in the workplace but also explores areas not previously investigated. However, as the findings from study one and two have shown, further research on anger is most certainly warranted. The areas which the research has highlighted as being the most worthy of future research are presented in the following section, together with suggestions on how this research could be carried out.

### **9.3.1 Methodological issues of the current research**

#### *Reducing the size of the model*

Due to time constraints of the PhD and the size that the theoretical model had expanded to only a small number of elements from the model were investigated in study two: the anger diaries. Nonetheless, even using a smaller number of elements from the model still presented methodological challenges for the researcher. For example, each variable from the model had to be developed into a question for the anger diary. This resulted in a fairly large amount of questions to not only be developed by the researcher but also to be answered by the participants each time they experienced an anger incident.

Furthermore, the researcher had to ensure that the anger diaries were distributed to participants in four different sectors. Again, as in study one: the interviews, the researcher misjudged the time it would take to collect a large amount of data from so many participants especially as ESM were being employed. This challenged the time and resources of the researcher and could have possibly jeopardised the quality of the data collection and results. Additionally, not only was it difficult to recruit participants from so many sectors and organisation but the researcher was also trying to recruit an equal amount of participants who held managerial and non-managerial positions.

### ***Shorter diary and fewer participants***

Hence, taking the above points into consideration, the theoretical model in this study could be broken down in future studies into several components. Future research could explore further the elements in both the preliminary and causal model and only involve looking at specific elements of the model, for example, the causes of anger or the characteristics of anger at one time. In ensuring that only a small number of elements were examined would also ensure that the diary, or whatever tool is used to measure anger, is shorter and would therefore involve using fewer questions to be asked at each anger incident. Subsequently, participants may be more willing to complete one page on an anger incident, instead of three double-sided pages, each time they experience an anger incident.

In addition, it would be beneficial if a smaller number of participants were recruited in future research. This would allow the researcher to build up a good rapport with the participants which is so essential in studies employing ESM and would hopefully increase the response rate. Additionally, including only one or two sectors or organisations to take part in the study would no doubt afford the researcher more time to spend on collecting data from individuals and analysing that data.

### ***Involve participants from the beginning of the study***

It is not possible to ascertain the reasons why certain people did not complete the anger diary. Maybe future research could look at the sectors where the response rate was particularly low. It could be possible for instance that those employees in the health sector found it difficult to complete diary entries as doing so could put the safety of

patients at risk. Therefore, asking participants how they would prefer the data to be collected on anger at work prior to future studies may ensure that more appropriate methods are employed for a particular sector or organisation. As people have very different job descriptions and tasks to carry out at work, trying to design tools which aid in the collection of data may prove beneficial for both the participant and the researcher. Participants could be asked, for example, how a particular method suits their working conditions and needs: thus, shift workers, health care workers and those in retail may all need methods suited to them specifically depending on what sort of work they do.

### ***The use of random sampling***

Trying to recruit participants for any study can sometimes prove extremely difficult; however, trying to recruit participants for studies employing ESM, particularly over considerable lengths of time, is notoriously difficult. Hence, trying to recruit a random sample is not always preferable, and as already pointed out, the ‘busy’ or ‘busier’ people may normally opt out of such studies. However, using random samples may in fact lead to a more varied group of people in the study. Therefore, an attempt to gather information on anger with methods more suited to the individuals’ job tasks, which include methods that may not be as time consuming or intrusive as those in the current research, may be the solution in future research. This may tempt those people who may not normally take part in such studies to actually do so.

### ***Anger explored from different perspectives***

Future research could also adopt the experiences of the offender of the anger incident too so that anger can be explored from both sides. The data in the current study describe only one person’s perspective on the anger incident and researchers may obtain richer results if they were to gather data on the same anger-eliciting incident from both perspectives.

### ***Problems with entry into organisations for recruitment of participants***

When organisations are sceptical about taking part in research on anger the researcher could inform the organisation that there are many negative outcomes to allowing anger to be experienced by employees. Furthermore, organisations could be made aware of

the negative impact that anger could have on the organisation itself, especially if their employees experience anger in the long-term.

Additionally, and as to appear less threatening, studies could be carried out using less invasive methods than the ones used in the current research. Organisations who feel that their identity will be revealed or that their employees will come to find that there are serious issues that could be possibly being covered up by management may feel vulnerable if they are to be exposed. Hence, such issues need to be addressed delicately. Possibly, assessing emotions in general, so that anger could be examined alongside, happiness, boredom, and other emotions would be a less threatening approach. This makes the risk of disclosing an angry workforce or organisation less likely.

### **9.3.2 Future research relating to the key findings of the current research**

#### ***Causes of anger***

Taking into account the points noted above future studies could try concentrate on the causes of anger using a smaller, randomised sample in only one or two sectors. The researcher could then try and build up good relationships with participants and increase the response rate. ESM tools could still be employed although these would benefit from being considerably shorter and methods could be used which are more suited to the organisation and employees daily tasks. Hence, future studies could investigate if the findings of disrespect, unjust treatment, unprofessional behaviour, powerlessness, humiliation and jealousy and job incompetence is still more likely to lead to expression of anger. Furthermore, future research could separately establish if the results apply to other sectors in different contexts and with different sources of anger.

#### ***Future research on the frequency, intensity and duration of anger***

Another area worth researching would be the frequency, intensity and duration of anger. Although both study one and two showed that anger may or may not be experienced frequently it does however seem to be experienced quite intensely and for quite long periods of time. However, job roles differ in the frequency that employees are expected to interact with internal and external sources. Hence, this may be a factor which has an

effect on the frequency of anger incidents and other aspects of anger incidents. Future research could therefore look at how much time people spend with external and internal sources and the effect this has on anger incidents.

### ***Short and long-term consequences of anger***

Trying to examine the consequences of anger in the short and long-term may provide the most interesting information to researchers and managers. The results in study one: the interviews have already highlighted the detrimental effects of long-term anger and although the short-term consequences of anger are not to be ignored, the consequences of long-term anger may prove to be even more detrimental to the individual and organisation. Thus it is imperative that the long-term consequences of anger are looked at and it is without a doubt that more research is needed in this area.

### ***The expression of anger and consequences at Time 1 and Time 2***

Prospective studies could be undertaken in which anger expression is assessed at one point in time and correlated with consequences (e.g. self-report, informant, behavioural observations, or work incident reports) at a later time. Correlating measures of anger expression at time 1 with consequences at time 2 would not only prospectively delineate expression - consequence relationships but also reduce methodological concerns about assessing expression concurrently with the retrospective reports of consequence.

### ***Future research on Job Satisfaction***

In the current research, again due to time constraints, the researcher was unable to measure job satisfaction with the Faces Scale. The Faces Scale is believed to tap into the affective component of job satisfaction more so than the JDI or JIG. Thus, future research could examine whether there is a relationship between the experience of anger incidents and the affective component of job satisfaction.

### ***Future research on Work Environment Features***

AET proposes that work environment features have an effect on affective reactions (i.e. anger) via the affective event (i.e. the anger causing event). In addition, in the

researcher's own model, it is proposed that there are certain influences of anger that have an effect on the angry reaction via an anger causing event. In this study stress, mood, accumulation of anger and inadequate training were thought to be factors that influenced anger incidents. It could be the case that there were certain other influences of anger that were not identified in this study. Therefore, further research could be carried out to see if there are certain factors which are influencing the experience and expression of anger.

### ***Examination of anger in particular sectors***

The retail and wholesale sectors were the two sectors in this study where anger expression was most likely to occur. Thus, these two sectors may need particular attention when it comes to reducing anger expression. Future research could further address the findings from study two: the anger diaries that show that context and source are associated with expression of anger particularly when the offender is a student or pupil. Therefore investigating anger in the education sector and examining this further will hopefully benefit the teachers, tutors and lecturers who are becoming angry within this sector.

### ***Norms, display rules and culture***

The fact that the work environment features may have an effect on anger and that people may react differently to anger in different settings does suggest that the environment in which anger is experienced has a greater part to play than may be originally thought. Thus, the norms and display rules within these sectors may be determining the outcome of anger events more so than other factors, such as context, source or sector or even individual differences or stress for example. Additionally, the culture of a workplace may have a greater influence on the occurrence of anger incidents and how they unfold. Therefore, greater emphasis on the need for research which includes examining the norms, display rules and culture within organisations is required, as they may be the key factor in determining how the emotion of anger functions at work.

As previously stated anger can be functional or dysfunctional. It has not been determined at this stage whether the expression of anger is actually doing any harm to

the individual or the organisation within which it is expressed. However, research on emotional contagion does suggest that successful management of emotion is important in customer retention and is important within work groups (Miron-Spekto & Rafaeli, 2009). Therefore, expressing anger in a dysfunctional manner may not only lead to a loss of custom but may have an effect on other workers who are witnessing anger expression. Further research in this area could investigate the functional properties or dysfunctional properties of anger and the effect it is having on other workers.

Finally, with regards to future studies on anger, the needs of the researchers' thirst for knowledge should be weighed up against the practical implications of trying to collect the data and subsequently having to analyse it. The term 'less is more' seems appropriate in such cases.

## **9.4 ANGER MANAGEMENT**

### **9.4.1 Legal and moral duties of organisations**

Business owners, managers and employees who are unable to control their anger or effectively respond to the angry outbursts of others may find that their businesses and/or careers suffer as a result (Adams, 2010, as cited in Encyclopaedia of Small Business, 2010). Adams (2010) goes on to state that organisations may be in breach of their legal duty if they fail to look after their employees' health, safety and welfare, by not dealing with anger effectively.

Furthermore, Hillstrom and Laurie (2006) have stated that even in positive work environments, managers need to prepare themselves for the day when they encounter anger amongst colleagues. Hillstrom and Laurie (2006) state that anger can have an enormous impact on the entire workforce and in the eyes of the law, business owners and managers have the power and obligation to control their employees.

Hence, it seems clear that organisations not only have a moral duty to take care of their employees, but they clearly have a legal duty too. Thus, organisations need to implement anger management programmes which tackle the problem of anger at work and the results from this present study suggest that certain areas may need to be targeted more so than others. This present study also highlights that fact that tailor-made



programmes (Swaffer & Holin, 1997) may need to be implemented in different organisations. As recognised by Brownell (1999) there is no one clear way to prevent and defuse anger in the workplace as each situation and individual is different. The following sections aim to first highlight the areas of that may need more attention with regard to interventions followed by suggestions on how anger can be managed based on such findings.

#### **9.4.2 Which areas need to be targeted?**

##### *Context*

First of all, it seems that people do react differently to anger and that this may depend on who the offender is in an anger incident. For instance, it seems apparent from the results in study two: the anger diary that student and pupils are the offenders in this study who teachers, tutors and lecturers are most likely to react to when it comes to anger expression. As the main cause of anger from students and pupils is disrespect interventions may want to tackle this particular behaviour in students and pupils and concentrate on reducing disrespectfulness in the education sector.

##### *Source of anger*

Previously, organisations may have ignored or paid little attention to internal anger incidents as organisations have tended to focus on the importance of retaining customers and providing good patient care. Therefore, organisations spend time and money on training employees in how to deal with external anger incidents rather than internal incidents.

Nevertheless, as this study has shown, it is the internal anger incidents which could be harming employees and having a negative effect on them the most. This was highlighted in study one in particularly when participants stated that they expected to be angered from external sources at work and they were prepared to deal with such incidents; however, they were not equipped to deal with anger incidents that involved other colleagues. This anger tended to have a greater effect on them. There could be many reasons for this but clearly people are restricted by what they can do and say at work, especially with colleagues. Their livelihood may depend on how they react at

work, so instead of dealing with anger incidents, they could harbour anger within them for days, months or years without being able to express it, or deal with it effectively. Therefore, in order to enable employees to function effectively at work and in order for organisations to have a workforce which does not react poorly in response to anger these issues have to be dealt with. Thus employees have to be trained to deal with internal anger incidents as well as being trained to deal with external anger incidents.

### *Sectors*

Furthermore, experiences of anger also seem to differ depending on where that anger is experienced, for example, whether the anger is experienced in the health sector, education, wholesale or the retail sector. As already suggested, this could be due to the display rules in different sectors which may allow for the control of others' behaviour through the use of expression of anger. For example, the control of students and pupils may be carried out by the teachers expressing anger to try and manage them. However, expressing anger is not healthy for the individual and witnessing anger is likely to have a negative effect on other people around the angry person. Hence, the reduction of the experience and expression of anger is crucial for the individual and the organisation and individuals must be taught to deal with anger before it reaches the stage where people feel they have to express their anger.

Anger management programmes could therefore initially aim to assess the norms and display rules within organisations and try to change the culture of the workplace entirely via the explicit and implicit norms of the workplace. This could be carried out with changes to employment manuals, training courses and posters which are displayed around organisations which remind employees that there is a zero tolerance to expression of anger. In addition, reminders to reduce anger expression could target causes of anger which are most likely to cause anger expression in each particular sector. For example, disrespect seems most common in the education sector, whereas humiliation common in the health sector. Thus, trying to make people in these sectors particularly aware that these types of events are creating anger may help to prevent and reduce such occurrences.

### ***Training employees on how to deal with expression and suppression of anger***

Furthermore, employees that express their anger need to be made aware of their behaviour at work and be made aware of the consequences that their expression of anger may be having on not only their health but on others around them. Also, people who suppress anger should also be made aware of the dangers of suppressing anger. For those working in the service sector suppressing anger may not be an option; however, people can still be trained to deal with their anger no matter who the offender is. Hence, both expression and suppression of anger need to be dealt with in anger management programmes as both can bring with them negative effects on the individual and organisation.

### ***Target the cause of anger***

This current research has shown that the context of the anger incident can have an effect on the unfolding process of the anger incident. For example, internally, superiors were most angered by unjust treatment, coworkers by others' immoral behaviour, particularly others' laziness and subordinates by others' immoral behaviour and others' unprofessional behaviour. These results clearly demonstrate that anger incidents can be very different for individuals and that the cause of anger may also differ depending on who is experiencing the anger.

Indeed targeting the cause of the anger seems logical in trying to combat anger incidents occurring in the first place. The list of causes in study one: the interviews shows that there are many different causes of anger, some which have already been identified in previous studies, and study two: the anger diary shows that there are also some causes which specifically lead to the expression of anger. This would suggest that not all people are affected in the same way by the instigators of anger and some causes of anger have different effects on different people. Thus in designing interventions to prevent anger, researchers and managers must be aware that it may be futile to deal with poor communication in the education sector, for instance, when people are becoming angry and expressing anger over disrespectful students and pupils. This would therefore suggest that the causes of anger need to be identified in each sector or organisation separately before they can be dealt with.

### ***Frequency, intensity and duration of anger***

Although participants in study one: the interviews suggested that they frequently experienced anger incidents, study two showed that this was not the case. Study two: the anger diary showed that although anger may have been intense and long lasting it was not experienced too frequently. Nonetheless, these results do suggest that feelings of anger are lasting over time. Therefore, interventions need to be able to implement strategies which teach people essentially how to deal with their anger so that they are not harbouring grudges or holding on to their feelings of anger for considerable lengths of time.

### ***Short and long-term consequences of anger***

Although not analysed in study two, the results from study one suggest that the consequences of anger can lead in the main part to particularly negative outcomes for the individual and the organisation. In order to prevent employees from having to deal with these negative consequences employees should be equipped to deal with anger so that when it does arise or incidences occur, the individual can deal with them accordingly.

### ***Reduce stress***

Certain other factors at work have shown to influence the expression of anger such as stress. People who have high stress levels and conflict in their lives, with a poor coping skills, can have the most distressing effect on the work environment and their coworkers (Brownell, 1999). Hence, in such situations, the aim may be to reduce the stress and conflict and increase the coping skills of the individual.

## **9.4.3 Approaches to anger management**

### ***Cognitive behavioural approach to anger management***

The previous section has highlighted the need for anger management programmes to tackle anger by firstly focusing on the context, source and sector, and in particular the norms and cultures of organisations. Moreover, it has illustrated the need to target the

causes of anger, the frequency, intensity and duration of anger and the short and long-term consequences of anger. Finally, it proposed that interventions should include training employees in how to deal with the expression and suppression of anger and the reduction of stress in order to prevent the occurrence of anger incidents. The following section looks at strategies which can be implemented in organisations to help employees manage, reduce and even prevent anger incidents occurring in the first place.

Studies have shown that Beck's cognitive behavioural approach (Dahlen & Deffenbacher, 2001) is particularly successful for anger management. The emphasis is on a change in general thinking patterns and general tension levels, as well as adopting these changes as skills for dealing with particular situations. This is achieved through teaching people how to use a variety of coping skills, such as, relation-coping skills, cognitive-coping skills and social skills training (Gerzina & Drummond, 2000). For example, Gerzina and Drummond (2000) have shown that the frequency, duration and intensity of anger was reduced in police officers using techniques to change general thinking patterns and general tension levels when faced with angry situations. The treatments applied to the police officers went beyond simply training participants in how to cope with anger-provoking situations; it actually helped participants to limit the experience of anger and then to cope with the situation if anger did develop.

Indeed, Beck's cognitive behaviour therapy has been applied successfully to anger many times, and it has been extremely successful (Dahlen and Deffenbacher, 2001). When Deffenbacher, Dahlen, Lynch, Morris and Gowensmith (2000) applied Beck's cognitive therapy to angry college students, cognitive therapy reduced anger, anger suppression and outward negative anger expression, and increased positive expression styles. Achievements in anger reduction were also maintained at long-term follow. Such findings not only provide support for Beck's cognitive behaviour therapy but its utilisation in the reduction of anger and the expression and suppression of anger within organisations.

There are a variety of techniques used in cognitive behavioural therapy which are said to be extremely effective for reducing anger. These techniques are used in Anxiety Management Therapy (AMT) which has proven equally effective for the control of both anxiety and anger (Suinn, 2001). Suinn (2001) proposes that the fundamental principle is the importance of exposing individuals to anxiety or anger arousal and then

deactivating the emotional arousal through relaxation skills. People are first exposed to anger through visualisation, which is then followed by relaxation, homework practice, self monitoring and gradual fading in of self-control skills. In addition personal training and role playing are said to help people get to know themselves better and thus learn to react better. Also, acting out roles in front of an audience is believed to make individuals appreciate that their behaviour and attitudes are inappropriate, and may trigger angry reactions in offenders. Thus, it is hoped that they may, from acting out such roles, correct the errors in their behaviour.

Thus, previous research on anger management has provided suggestions on how to deal with the anger in this present study. Such techniques could be applied to employees at all levels within many different organisations. Organisations must not undervalue the importance of equipping employees with the coping skills, social skills and relaxation techniques to be able to cope with anger at work.

In addition, carrying workshops and seminars using the visualisation techniques could be used to tackle workplace anger. Employees at all levels could use visualisation and relaxation techniques using the causes of anger identified in study one: the interviews. In addition, acting out the anger incidents in study one: the interviews, and using the behaviours (i.e. verbal abusive, non-verbal abusive, body language and physical aggression) as examples of reactions to anger, could be used to help employees react better to anger in real life interactions. As a result not only can the frequency, duration and intensity of anger be reduced using such skills but also the suppression and expression of anger. Using interventions to prevent and reduce the occurrence of anger will undoubtedly reduce the short and long-term consequences of anger too.

### ***Venting anger***

Finally, should angry people vent their anger and in other ways such as punching a pillow instead of expressing their anger? Interestingly, Bushman (2002) has looked at the whether venting anger will improve an angry person's psychological state and in particular looked at rumination (i.e. directing attention inward on the self or one's negative mood) and distraction as a way to reduce anger. Bushman (2002) proposed that any process that serves to exacerbate a negative mood, such as rumination, should increase anger and aggression. In contrast, Bushman (2002) proposed that any process

that distracts attention away from an angry mood should reduce anger and aggression. Bushman (2002) found that “venting to reduce anger is like using gasoline to put out a fire: it only feeds the flame” (pg. 729). Venting produced more anger and aggression and did not lead to a more positive mood. People who were in the distraction group were less angry than the people in the rumination group, but they were not less aggressive. The results showed that people were best off doing nothing at all than venting their anger. So, the results from Busman’s (2002) suggest that punching a pillow may initially feel good, but it is likely to prolong or increase feelings of anger.

#### **9.4.4 One size does not fit all**

The findings from this research suggest that an assessment of each organisation to determine the causes and consequences of anger before applying anger management programmes in organisation appears to be essential if they are to have any positive outcomes. Applying anger management with a “one size fits all” approach would no doubt lead to limited effect. So, for instance, dealing with managers in the health sector may involve a very different approach than dealing with non managers in that sector. Furthermore, dealing with managers in the education sector may involve a very different approach than dealing with managers in the retail sector.

So, interventions should include assessing each organisation as one might assess an organisation’s culture in order to try and change it. Context, source, and sector may all influence the causes and experience of anger and each person within different organisations may need to be equipped with different tools and techniques to deal with anger.

Thus, individuals and organisations need to be individually assessed. Just as individuals are different, the cultures and norms in organisations can be very different and these could allow for anger to be expressed or suppressed or dealt with in a variety of ways. People carrying out anger management programmes must be aware of this. One suggestion is to always carry out assessments in an organisation first to assess the culture of an organisation first before trying to even examine anger in individuals.

## 9.5 CONCLUSIONS

In conclusion, the PhD demonstrates the importance that the contextual and situational factors have on anger incidents, and provides a deeper understanding of what is influencing the expression and suppression of anger.

The research followed on from studies on emotions in general, and the initial findings on emotional labour, which suggested that anger is the most commonly suppressed emotion at work. The variables addressed in this PhD expanded on this previous work and from the qualitative research in study one, a theoretical model on anger in the workplace has been built. The theoretical model has identified new variables within the unfolding process of anger incidents. Particularly, it has discovered new findings as to what causes people to become angry at work, what they do and feel when they do become angry, and how they behave and feel as a consequence of anger incidents. In addition the theoretical model has also identified possible links to other factors which may affect the anger incident occurring in the first place.

Further investigation of particular aspects of the model showed that certain factors appeared to be more important than others, particularly the influence that the context, source and employment sector had on anger expression and suppression of anger. Additionally, the finding that certain events led to expression of anger, more so than others, was identified. Finally, feeling stressed prior to an incident was associated to expression of anger and feeling satisfied with people and work could influence whether the angry person expressed or suppressed their anger.

The research described in this thesis demonstrates the importance of preventing anger at work in the first place, as ignoring anger will be allowing the individual and the organisation itself to suffer. The research has highlighted the importance of tailor-making anger prevention programmes to meet the needs of workers at all levels and in different employment sectors.

Anger incidents have been captured as they were experienced, in real time, and over time. This has enabled the researcher to begin to build up a picture of people's experiences of anger, and begin to predict what might happen in certain circumstances for anger to flourish. Unfortunately, many factors in the theoretical model were not



examined due to time constraints. This leaves considerable gaps which could be addressed in future research, particularly concerning the short and long-term consequences of anger in the workplace. Many other factors have been associated with anger in this research, and there are still so many more issues that need to be addressed: many of these factors lie within the theoretical model built in this present research.

Nonetheless, the PhD has highlighted the fact that measuring anger in real time, over time enables the collection of data which provides a more accurate picture of anger incidents at work. Memory recall is not affected as much as it would be with one-off self-reports of anger, even though it is acknowledged that there have been certain limitations to carrying out this study using anger diaries and ESM. Even so, the research has provided an insight into what is happening with regards to anger at work and what the causes, characteristics and consequences of anger are and what influences the expression and suppression of anger. However, much more research needs to be carried out using ESM, to try and unravel the process of anger incidents at work and investigate workers' experiences of anger.

## CHAPTER 10

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# **APPENDIX 1**

## **UCLAN ETHICS FORM**

Our ref: ethics/let/27feb02

UNIVERSITY  
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*Head of Department*  
Dr Paul Pollard

18<sup>th</sup> April 2002

Dear Jill Booth,

I am pleased to inform you that your Research Project entitled 'An investigation into the causes and consequences of anger in the workplace' has been approved by the Ethics Committee subject to details being included in the debriefing of participants of what they should do if they have become distressed whilst taking part in the research. Also an additional statement should be included in the pre-briefing to advised participants that once the questionnaire has been submitted then they cannot withdraw from the research as the questionnaires are anonymous. Please can you also submit a copy of the finalised questionnaire to the committee prior to commencing with your project.

Yours sincerely,

Mike Eslea  
Chair of Psychology Ethics Committee.



**APPENDIX 2**

**N.H.S. ETHICS FORM**

Tel: 01772 522031  
Fax: 01772 522031  
Email: Margaret.Johnson@lthtr.nhs.uk  
Reply to: Royal Preston Hospital

**RESEARCH AND DEVELOPMENT DIRECTORATE**

**Director of Research: Professor J D Mitchell      R&D Manager: Mr J H Wardle**  
**Administrator: Mrs M Johnson**

Our Ref.: JDM/MJ

3<sup>rd</sup> July 2003

Mrs J Booth  
Psychology Researcher  
University of Central Lancashire  
Department of Psychology  
University of Central Lancashire  
PRESTON  
PR1 2HE

Dear Mrs Booth

**Re study:      An investigation into the Causes and Consequences of Anger in the Workplace**

Thank you for submitting this project, which was reviewed by the Scientific and Financial review Sub-Committee on behalf of the Trust on 2<sup>nd</sup> July 2003.

I am pleased to confirm that the Trust has no objections to you proceeding with this research within this organisation and that this approval applies to Preston, Chorley and South Ribble and West Lancashire PCT's subject to discussion and agreement with individual parties concerned.

The Committee noted that this project is a student research study. In order to meet the requirements of the Research Governance Framework it will be necessary for you to obtain letter of support from your tutor/academic supervisor, confirming the following points:

1. That this research does not unnecessarily duplicate previous research
2. That in the view of the supervisor, this research is scientifically valid
3. That this research conforms with the academic objectives of your course as laid down at validation by the Metropolitan University in Manchester.

Yours sincerely



Mr J H Wardle  
R&D Manager

Copies to:  
Dr S Mann, Supervisor  
Dr I M Drake, Chairman LREC

## **APPENDIX 3**

### **IN DEPTH INTERVIEW SCHEDULE**



## In depth interview schedule

### **Causes of Anger**

- Explore the general causes of anger at work
- Ask about specific anger events
- Find out who participant thought was to blame

### **Characteristics of the Anger Incident**

#### **Immediate Feelings**

- Find out about intensity of anger at the time
- Ask whether participant thought anger was justified or not
- Explore feelings of power
- Ask about feelings of hate
- Explore other feelings

#### **Emotional Labour**

- Ask whether participant faked any other emotion at the time

#### **Immediate Behaviour**

- Ask about expression, suppression and control of anger
- Find out what was said and done (e.g., avoidance, aggress directly, aggressive indirectly, talk it over, try to resolve your differences, express hurt feelings).

#### ***Reaction of victim to angry person***

- Find out how the other person reacted to participant's anger (e.g. did they deny responsibility, snub participant, make fun of participant)

#### **Immediate Consequences of the Anger Event**

- Explore the feelings of the participant immediately after the event
- Ask about their behaviour immediately after the event
- Inquire about social support
- Find out whether participant thought the incident had been successfully resolved

#### **Later Consequences of Anger Event**

##### **Feelings**

- If participant thought the anger incident had been resolved, explore issues regarding the relationship between the victim and offender subsequent to the event

If they thought the anger incident had **not** been resolved:

- Find out how long the participant felt angry
- Explore the feelings that the participant held during that time. (For example, did they hold a grudge for the offender or did they hate the offender).
- Ask whether participant thought it had been successfully resolved

*Explore retaliatory behaviours.*

- Did anybody do anything to the other person or the organization to get back at them

## **APPENDIX 4**

# **PARTICIPANT INFORMATION SHEET FOR INTERVIEWS**

Version: 1 (Interviews)  
Date: 14<sup>th</sup> August 2003

### Participant Information Sheet

## **Study Title: An Investigation into the Causes and Consequences of Anger in the Workplace**

### **Deciding to take part in the study**

My name is Jill Booth and I am from the department of psychology at the University of Central Lancashire. You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Ask me if there is anything that is not clear. Take time to decide whether or not you wish to take part.

### **What is the purpose of the study?**

I am attempting to gain information about people's experiences of anger in the workplace. The first part of the study, which **you** are being invited to take part in, will involve inviting around thirty people who work in several different work areas to share their experiences, perceptions and feelings about particular anger events at work. The second part of the study, will involve using this information to produce a questionnaire, which will be given to a much larger group of people later on this year. Hopefully, the results from the questionnaire will not only help researchers and managers alike to understand how anger influences workers' emotional reactions, attitudes and behaviours but also help to identify the causes of anger events and therefore reduce its occurrence.

### **Why have I been chosen?**

You have been invited to take part in the study because you have certain things in common with other interviewees, which are of particular interest to me. Basically you are in full-time employment in one of the sectors I am interested in and probably you have experienced anger at work.

### **Do I have to take part?**

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this Information Sheet to keep and be asked to sign a Consent Form. What's more, you are still free to withdraw at any time from the study and without giving a reason.

### **What do I have to do?**

The interview will last no longer than 1 hour. I will just be asking you some questions about your experiences of anger at work. However, you will probably be doing most of the talking.

### **Will my taking part in the study be kept confidential?**

I will be tape-recording the session because I don't want to miss any of your comments. Recordings can be later heard or read (after transcription) and also sections may be omitted or the whole recording destroyed at your request. You may be assured of complete confidentiality and there will be no names or company names attached to later reports. Any information that you provide which leaves the university will have your name and details removed so that you cannot be identified.

### **What will happen to the results of the research study?**

This is strictly a research project, funded by the University of Central Lancashire. The results of the study will be ready by the end of May 2005. Please note that you will **NOT** be identified in any reports or publications. A final copy of the research report will be sent to all participants. Please inform me if you do not wish to receive a copy.

### **What do I do if I need anymore information?**

If at any time during or after the collection of survey data you feel that you need more information please contact me. Contact details are provided below.

**Thank you very much for considering to take part in this study.**

Jill Booth, Department of Psychology, University of Central Lancashire, Preston. PR1 2HE  
Tel. no.: 01772 894464 Email: Jbooth@uclan.ac.uk

## **APPENDIX 5**

### **CONSENT FORM FOR INTERVIEWS**

## CONSENT FORM

**Title of Project:** An Investigation in to the Causes and Consequences of Anger in the Workplace

**Name of Researcher:** Jill Booth

1. I confirm that I have read and understand the information dated .....for the above study and have had the opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.
3. I consent to the publication of study results so long as the information is anonymous and disguised so that no identification can be made. I further understand that although a record will be kept of my having participated in the study, all data collected from my participation will be identified by number only.
4. I agree to take part in the study.

Concerns about any aspect of the study may be referred to: Jill Booth, Department of Psychology, University of Central Lancashire. PR1 2HE. Tel. No.: 01772 894464  
Email: Jbooth@uclan.ac.uk

-----  
Name of participant                      Date                      Signature

-----  
Name of researcher                      Date                      Signature

## **APPENDIX 8**

### **JDI AND JIG**

Participant's Unique Code

--	--	--	--

**Job Descriptive Index and Job in General Scales**

This questionnaire will measure how satisfied you are with certain aspects of you job and also your job overall.

**ALL INFORMATION PROVIDED IS ANONYMOUS AND CONFIDENTIAL**

1. Could you please make sure **your** unique code is in the boxes in the top left hand corner of this page.
2. Could you please complete the questionnaire answering ALL the questions.
3. Could you please place the completed questionnaire in the envelope provided and return it to the researcher (Jill Booth) directly or return it by post in the envelope provided.

**WORK ON PRESENT JOB**

Think of the work you do at present. How well does each of the following words or phrases describe your work? Circle:

- 1 for "Yes" if it describes your work
- 2 for "No" if it does not describe it
- 3 for "?" if you cannot decide

	Y	N	?
Fascinating.....	1	2	3
Routine.....	1	2	3
Satisfying.....	1	2	3
Boring.....	1	2	3
Good.....	1	2	3
Gives sense of accomplishment.....	1	2	3
Respected.....	1	2	3
Uncomfortable.....	1	2	3
Pleasant.....	1	2	3
Useful.....	1	2	3
Challenging.....	1	2	3
Simple.....	1	2	3
Repetitive.....	1	2	3
Creative.....	1	2	3
Dull.....	1	2	3
Uninteresting.....	1	2	3
Can see results.....	1	2	3
Uses my abilities.....	1	2	3

## PAY

Think of the pay you get now. How well does each of the following words or phrases describe your present pay?

	Y	N	?
Income adequate for normal expenses.....	1	2	3
Fair.....	1	2	3
Barely live on income.....	1	2	3
Bad.....	1	2	3
Income provides luxuries.....	1	2	3
Insecure.....	1	2	3
Less than I deserve.....	1	2	3
Well paid.....	1	2	3
Underpaid.....	1	2	3

## OPPORTUNITIES FOR PROMOTION

Think of the opportunities for promotion that you have now. How well does each of the following words or phrases describe your opportunities for promotions?

	Y	N	?
Good opportunities for promotion.....	1	2	3
Opportunities somewhat limited.....	1	2	3
Promotion on ability.....	1	2	3
Dead-end job.....	1	2	3
Good chance of promotion.....	1	2	3
Unfair promotion policy.....	1	2	3
Infrequent promotions.....	1	2	3
Regular promotions.....	1	2	3
Fairly good chance for promotion.....	1	2	3

## SUPERVISION

Think of your supervisor and the kind of supervision that you get on your job. How well does each the following words or phrases describe your supervision?

	Y	N	?
Asks my advice.....	1	2	3
Hard to please.....	1	2	3
Impolite.....	1	2	3
Praises good work.....	1	2	3
Tactful.....	1	2	3
Influential.....	1	2	3
Up-to-date.....	1	2	3
Doesn't supervise enough.....	1	2	3
Has favourites.....	1	2	3
Tells me where I stand.....	1	2	3
Annoying.....	1	2	3
Stubborn.....	1	2	3
Knows job well.....	1	2	3
Bad.....	1	2	3
Intelligent.....	1	2	3
Poor planner.....	1	2	3
Around when needed.....	1	2	3



## PEOPLE AT WORK

Think of the majority of people that you work with now or the people you meet in connection with your work. How well does each of the following words or phrases describe these people?

	Y	N	?
Stimulating.....	1	2	3
Boring.....	1	2	3
Slow.....	1	2	3
Helpful.....	1	2	3
Stupid.....	1	2	3
Responsible.....	1	2	3
Fast.....	1	2	3
Intelligent.....	1	2	3
Easy to make enemies.....	1	2	3
Talk too much.....	1	2	3
Smart.....	1	2	3
Lazy.....	1	2	3
Unpleasant.....	1	2	3
Gossipy.....	1	2	3
Active.....	1	2	3
Narrow interests.....	1	2	3
Loyal.....	1	2	3
Stubborn.....	1	2	3

## JOB IN GENERAL

Think of your job in general. All in all, what is it like most of the time? For each of the following words or phrases, circle:

	Y	N	?
Pleasant.....	1	2	3
Bad.....	1	2	3
Ideal.....	1	2	3
Waste of time.....	1	2	3
Good.....	1	2	3
Undesirable.....	1	2	3
Worthwhile.....	1	2	3
Worse than most.....	1	2	3
Acceptable.....	1	2	3
Superior.....	1	2	3
Better than most.....	1	2	3
Disagreeable.....	1	2	3
Makes me content.....	1	2	3
Inadequate.....	1	2	3
Excellent.....	1	2	3
Enjoyable.....	1	2	3
Poor.....	1	2	3

PLEASE RETURN THIS DOCUMENT IN THE LARGE BROWN ENVELOPE PROVIDED. THANK YOU.

## **APPENDIX 9**

### **GENERAL INSTRUCTIONS**

## ANGER AT WORK STUDY

Thank you for agreeing to take part in the study. Below you will find instructions on how to complete the questionnaires that you have been given. Please complete all questionnaires and return them to me before beginning the Anger Diary. Instructions on how to fill out the Anger Diary are in the diary itself.

### INSTRUCTIONS

1. Please start by reading the Participation Information Sheet. Once you have read this you can keep it for your own records.
2. Next, please read the Consent Form. Once you have read this please place it, **UNSIGNED**, in the large brown envelope.
3. Please then complete the Personal and Employment Details Form. Once again, place the completed form in the large brown envelope with the Consent Form.
4. Next fill in the Job Descriptive Index and Job In General Scales Questionnaire. Once completed, please also place this in the large brown envelope.
5. Finally, please complete the STAXI-2 questionnaire. Please remember to fill the details in at the top of the questionnaire as well. Full details on how to fill out this questionnaire are in the instruction booklet that comes with it. Please send **BOTH** the questionnaire and instruction booklet back to me in the large brown envelope with the above documents.

**Please remember that all documents are anonymous and confidential.**

6. In addition, after you have completed the above documents please complete the Contact Details Form. In order to keep this document separate from the above documents please return it back to me in the small brown envelope marked C.D.

**This information is completely confidential.**

Please note that you do not need to pay for any postage as **ALL** envelopes that you have been provided with have pre-paid postage.

Once again, many thanks for taking part in the study. In return for your time and effort, which is greatly appreciated, you are invited to take part in the Free Draw. The winner will receive £200 in cash. Further details are in the Anger Diary. You can keep the Anger Diary folder too!

If you require any further information please contact:

Jill Booth  
Darwin Building  
Department of Psychology  
University of Central Lancashire  
Preston  
PR1 2HE  
Tel. No. 01772 894464  
Email: [Jbooth@uclan.ac.uk](mailto:Jbooth@uclan.ac.uk)

**APPENDIX 10**

**PARTICIPANT INFORMATION SHEET FOR ANGER  
DIARY**

Version: 2 (Questionnaires)

Date:

## Participant Information Sheet

### **Study Title: An Investigation into the Causes and Consequences Of Anger in the Workplace**

#### **Deciding to take part in a research study**

My name is Jill Booth and I am from the Department of Psychology at the University of Central Lancashire. You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Ask me if there is anything that is not clear. Take time to decide whether or not you wish to take part. Thank you for reading this.

#### **What is the purpose of the study?**

I am attempting to gain information about people's experiences of anger in the workplace. Hopefully, the end results from the study will not only help researchers and managers alike to understand how anger influences workers' emotional reactions, attitudes and behaviours but also help to identify the causes of anger events and therefore reduce its occurrence.

#### **Why have I been chosen?**

You have been invited to take part in the study because you have certain things in common with other participants, which are of particular interest to me. Basically you are in full-time employment in one of the sectors I am interested in.

#### **Do I have to take part?**

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this Information Sheet to keep and be asked to return a Consent Form. What's more, you are still free to withdraw at any time from the study and without giving a reason.

#### **What do I have to do?**

1. First of all you will be asked to complete two questionnaires; one asking about how angry you tend to be in general and one asking about how satisfied you are with your job.
2. Secondly, you will be given an anger diary. You will be asked to keep this with you for a period of 20 full working days. Each time you experience an anger event you complete the questions within the diary.
3. Thirdly, you will be asked to complete some basic information about yourself.

#### **Will my taking part in the study be kept confidential?**

You may be assured of complete confidentiality and there will be no names or company names attached to later reports. The contents of the questionnaires are absolutely confidential and any information identifying participants will not be disclosed under any circumstances.

#### **What will happen to the results of the research study?**

This is strictly a research project, funded by the University of Central Lancashire. The results of the study will be ready by the end of May 2007. Please note that you will **NOT** be identified in any reports or publications. A final copy of the research report will be sent to all participants. Please inform me if you do not wish to receive a copy.

#### **What do I do if I need anymore information?**

If at any time during or after the collection of survey data you feel that you need more information please contact me. Contact details are provided below.

Jill Booth, Department of Psychology, Darwin Building, University of Central Lancashire, Preston. PR1 2HE.  
Tel. no.: 01772 894464 Email: [jbooth@uclan.ac.uk](mailto:jbooth@uclan.ac.uk)

## **APPENDIX 11**

### **CONSENT FORM FOR ANGER DIARY**

Participant's Unique Code

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## CONSENT FORM

**Title of Project:**

An Investigation into the Causes and Consequences of Anger in the Workplace

**Name of Researcher:** Jill Booth

1. I confirm that I have read and understand the information dated ..... for the above study and have had the opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.
3. I consent to the publication of study results so long as the information is anonymous and disguised so that no identification can be made. I further understand that although a record will be kept of my having participated in the study, all data collected from my participation will be identified by number only.
4. I agree to take part in the study.

Concerns about any aspect of the study may be referred to: Jill Booth, Department of Psychology, University of Central Lancashire. PR1 2HE. Tel. No.: 01772 894464  
Email: [jbooth@uclan.ac.uk](mailto:jbooth@uclan.ac.uk)

**IT IS IMPORTANT TO NOTE THAT BY RETURNING THIS FORM, WITHOUT THE REQUIREMENT OF A SIGNATURE, THAT YOU ARE GIVING CONSENT TO TAKE PART IN THIS STUDY AND AGREEING TO THE TERMS WRITTEN ABOVE.**

PLEASE RETURN THIS DOCUMENT IN THE LARGE BROWN ENVELOPE PROVIDED. THANK YOU

## **APPENDIX 12**

### **PERSONAL AND EMPLOYMENT DETAILS**



Participant's Unique Code

--	--	--	--

**PERSONAL AND EMPLOYMENT DETAILS**

**PERSONAL DETAILS**

1. Are you? (*Please tick*)
- |        |                          |
|--------|--------------------------|
| Male   | <input type="checkbox"/> |
| Female | <input type="checkbox"/> |

**EMPLOYMENT DETAILS**

2. Please indicate which of the following categories best describes the sector in which you work (*Please tick*):

- |                  |                          |
|------------------|--------------------------|
| Retail sector    | <input type="checkbox"/> |
| Wholesale sector | <input type="checkbox"/> |
| Education sector | <input type="checkbox"/> |
| Health sector    | <input type="checkbox"/> |

3. Please indicate the position you hold within your place of work (*Please tick*):

- |                                |                          |
|--------------------------------|--------------------------|
| Managerial/Supervisory         | <input type="checkbox"/> |
| Non-Managerial/Non-Supervisory | <input type="checkbox"/> |

**ALL INFORMATION IS ANONYMOUS AND CONFIDENTIAL**

PLEASE PLACE THIS DOCUMENT IN THE LARGE BROWN ENVELOPE PROVIDED. THANK YOU.

## **APPENDIX 13**

### **CONTACT DETAILS**

### CONTACT DETAILS

It is very important that I keep in contact with each participant throughout the study on a regular basis: this may be by text, email, letter, phone or face to face. This will give me the opportunity to inform you of when I will be at your workplace, either to collect any diary pages or to give you the chance to ask me anything regarding the study. Also, it will give me the opportunity to inform you of the study results and let you know who has won the free draw!!

In order to do this I will need to have some contact details. **These details are completely separate from the rest of the study and they can not be linked to your diary pages or questionnaires.** Please complete the form below entering in the form of communication that you would prefer me to take. Please tick your choice and leave your details:

Name: \_\_\_\_\_

Text (*Your mobile number*): \_\_\_\_\_

Telephone (*Landline number*): \_\_\_\_\_

Email (*Email address*): \_\_\_\_\_

By Post (*Your address*): \_\_\_\_\_

\_\_\_\_\_ Post code: \_\_\_\_\_

**ALL INFORMATION WILL BE DESTROYED AT THE END OF THE STUDY. THANK YOU**

### FUTURE STUDIES

At some time in the future, I may like to ask some of you some more questions in order to examine some of these issues in greater detail. If you would be willing for me to contact you again, please give your name and address below so that I can do so.

Name:

\_\_\_\_\_

Address:

\_\_\_\_\_

\_\_\_\_\_

Postcode: \_\_\_\_\_ Telephone: \_\_\_\_\_

**PLEASE NOTE ALL INFORMATION IS STRICTLY CONFIDENTIAL AND WILL ONLY BE USED BY THE RESEARCHER.**

PLEASE RETURN THIS DOCUMENT IN THE SMALL ENVELOPE MARKED C.D.

## **APPENDIX 14**

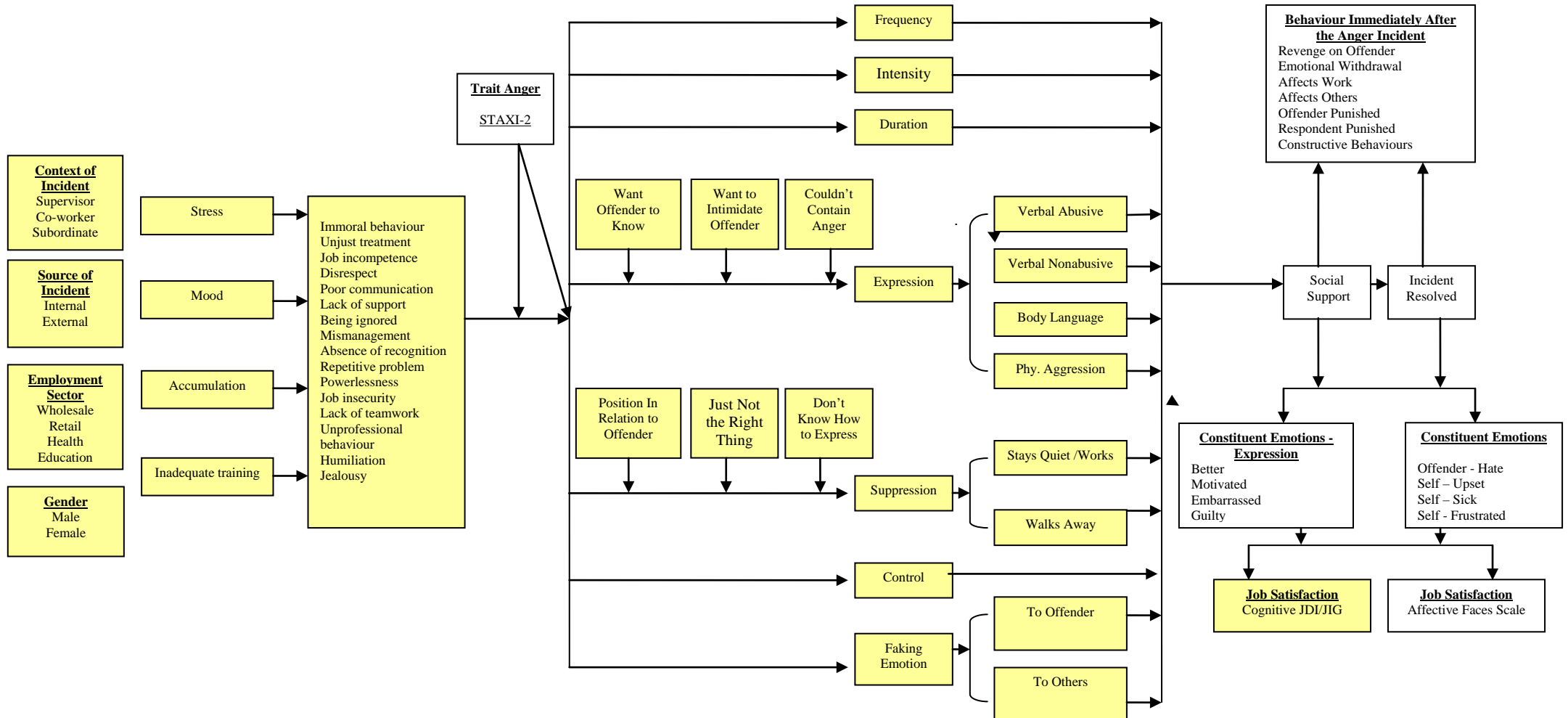
# **EXPLORATORY VARIABLES IN THE THEORETICAL MODEL**

Influences of Anger Incident

Causes of Anger Incident

Characteristics of Angry Reaction

Consequences of Anger Incident



## **APPENDIX 15**

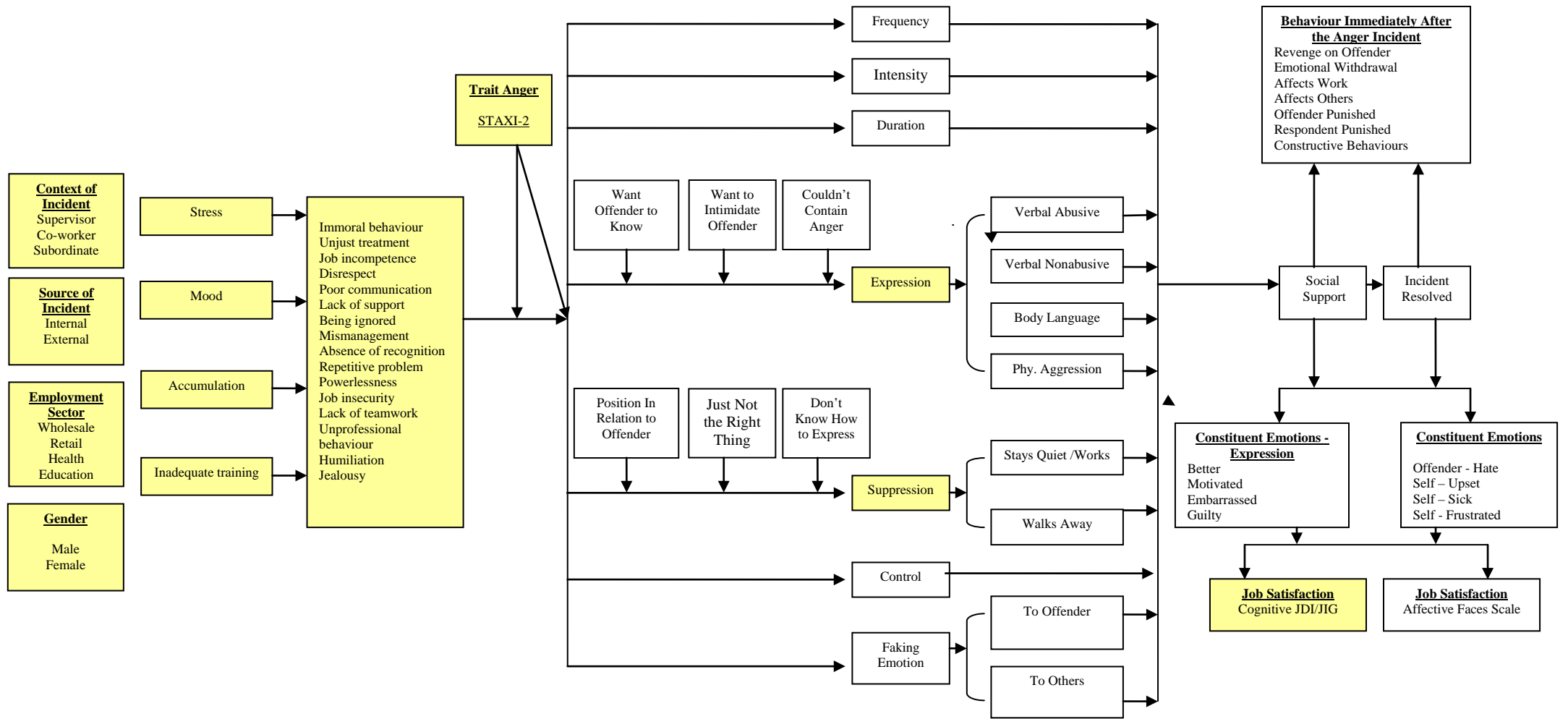
# **PREDICTOR VARIABLES IN THE THEORETICAL MODEL**

Influences of Anger Incident

Causes of Anger Incident

Characteristics of Angry Reaction

Consequences of Anger Incident



## **APPENDIX 16**

### **RECODED CATEGORIES**



The recoding of Employment Sector.

R_Employment _Sector	New Code
Wholesale	4
Retail	3
Education	2
Health	1*

\* Reference category

The recoding of Relationship with Offender

r_A_Relationship_w_Offender	New Code
Student/Pupil	7
Other	6
Patient	5
Subordinate	4
Coworker	3
Superior/Manager/Supervisor	2
Customer/Client/Supplier	1*

\*Reference category

The recoding of Cause of Anger Number

r_B1_Anger_Number	New Code
Disrespect	12
Unjust Treatment	11
Unprofessional Behaviour	10
Powerlessness	9
Humiliation	8
Jealousy	
Job Incompetence	7
Lack of Support	6
Being Ignored	
Absence of Recognition	
A Repetitive Problem	5
Mismanagement	4
Immoral Behaviour	3
Lack of Team Work	2
Poor Communication	1*

\*Reference category

## **APPENDIX 17**

### **PARAMETER ESTIMATES**

## Parameter Estimates

Parameter	Name of Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test			Exp(B)	95% Wald Confidence Interval for Exp(B)	
				Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper
(Intercept)		-2.065	1.3663	-4.743	.613	2.284	1	.131	.127	.009	1.846
	<b>Employment Sector</b>										
[r_Employment_Sector=4]	Wholesale	1.524	.4448	.653	2.396	11.745	1	.001	4.592	1.920	10.979
[r_Employment_Sector=3]	Retail	1.084	.4875	.128	2.039	4.941	1	.026	2.955	1.137	7.682
[r_Employment_Sector=2]	Education	.329	.4910	-.633	1.291	.449	1	.503	1.390	.531	3.638
[r_Employment_Sector=1]	Health	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.
	<b>Context</b>										
[r_A_Relationship_w_Offender=7]	Student/Pupil	2.360	.8085	.775	3.944	8.518	1	.004	10.588	2.171	51.648
[r_A_Relationship_w_Offender=6]	Other	1.572	.9412	-.273	3.417	2.790	1	.095	4.817	.761	30.477
[r_A_Relationship_w_Offender=5]	Patient	1.372	.9264	-.444	3.188	2.193	1	.139	3.943	.642	24.235
[r_A_Relationship_w_Offender=4]	Subordinate	1.106	.8099	-.482	2.693	1.864	1	.172	3.021	.618	14.774
[r_A_Relationship_w_Offender=3]	Coworker	.666	.6950	-.696	2.029	.919	1	.338	1.947	.499	7.603
[r_A_Relationship_w_Offender=2]	Superior/Manager/Supervisor	.579	.7012	-.796	1.953	.681	1	.409	1.784	.451	7.050
[r_A_Relationship_w_Offender=1]	Customer/Client/Supplier	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.
	<b>Cause of Anger</b>										
[r_B1_Anger_Number=12]	Disrespect	2.665	.9023	.896	4.433	8.721	1	.003	14.363	2.450	84.197
[r_B1_Anger_Number=11]	Unjust Treatment	2.649	1.0109	.667	4.630	6.865	1	.009	14.135	1.949	102.510
[r_B1_Anger_Number=10]	Unprofessional Behaviour	2.163	1.0889	.029	4.297	3.946	1	.047	8.699	1.029	73.507
[r_B1_Anger_Number=9]	Powerlessness	2.724	1.2838	.208	5.240	4.503	1	.034	15.244	1.231	188.732
[r_B1_Anger_Number=8]	Humiliation Jealousy	2.328	1.0327	.304	4.352	5.081	1	.024	10.255	1.355	77.625
[r_B1_Anger_Number=7]	Job Incompetence	2.051	.9769	.137	3.966	4.409	1	.036	7.777	1.146	52.765
[r_B1_Anger_Number=6]	Lack of Support/Being Ignored/Absence of Recognition	1.905	1.0537	-.161	3.970	3.268	1	.071	6.718	.852	52.987
[r_B1_Anger_Number=5]	A Repetitive Problem	1.834	1.0784	-.280	3.947	2.891	1	.089	6.257	.756	51.794
[r_B1_Anger_Number=4]	Mismanagement	1.750	.9955	-.201	3.702	3.091	1	.079	5.757	.818	40.509
[r_B1_Anger_Number=3]	Immoral Behaviour	1.537	.9262	-.278	3.352	2.754	1	.097	4.651	.757	28.570
[r_B1_Anger_Number=2]	Lack of Team Work	.738	1.2389	-1.690	3.166	.355	1	.551	2.092	.184	23.720
[r_B1_Anger_Number=1]	Poor Communication	0 <sup>a</sup>	.	.	.	.	.	.	1	.	.
	<b>Influences</b>										
C__Already_Stressed	Already Stressed	-.182	.0569	-.293	-.070	10.233	1	.001	.834	.746	.932
	<b>Job Satisfaction</b>										
JDI_Work	JDI Work	.038	.0153	.008	.068	6.202	1	.013	1.039	1.008	1.070
JDI_People	JDI People	-.060	.0146	-.088	-.031	16.640	1	.000	.942	.916	.969
(Scale)	Scale	1									

Dependent Variable: E1\_Express\_to\_Offender

Model: (Intercept), r\_Employment\_Sector, r\_A\_Relationship\_w\_Offender, r\_B1\_Anger\_Number, C\_\_Already\_Stressed, JDI\_Work, JDI\_People

a. Set to zero because this parameter is redundant.