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**EMPLOYEE NEGATIVE EMOTIONS IN SUPERVISORY RELATIONSHIPS:
AN ATTACHMENT THEORY PERSPECTIVE**

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Doctor of Philosophy

ASTON UNIVERSITY

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Aston University

Employee negative emotions in supervisory relationships:

An attachment theory perspective

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Thesis Summary

Relationships with supervisors are a major source of negative emotions at work, but little is known about why this is so. The aim of the research was to use attachment theory (Bowlby, 1969, 1973; 1980) as a framework for investigating the nature and causes of employee negative emotional experiences, in the context of their supervisory relationships. The research was conducted in three stages. In Stage 1 two studies were conducted to develop a measure of employee perceptions of supervisor caregiving (SCS). Results indicated that the 20-item scale had good reliability and validity. Stage 2 required participants (N=183) to complete a questionnaire that was designed to examine the roles of supervisor caregiving and working models (specific and global) in determining cognitive and emotional responses to hypothetical supervisor behaviours. The results provided partial support for an Independent Effects Model. Supervisor caregiving predicted specific anxiety and avoidance. In turn, both dimensions of attachment predicted negative emotions, but this relationship was mediated by event interpretation only in the case of avoidance. Global models made a smaller but significant contribution to negative emotions overall. There was no support for an interaction effect between specific and global models in determining event interpretation. In stage 3 a sub-sample of questionnaire respondents (N=24) were interviewed about 'real-life' caregiving and negative emotional experiences in their supervisory relationships. Secure individuals experienced supervisors as consistently warm, available, and responsive. They reported few negative events or emotions. Individuals with insecure specific working models experienced rejecting or inconsistent supervisor caregiving. They were sensitised to trust and closeness issues in their relationships, and reported negative events and emotions underpinned by these themes. Overall, results broadly supported attachment theory predictions. It is concluded that an attachment theory perspective provides new insight into the nature and causes of employee negative emotions in supervisory relationships.

Key Words: CAREGIVING WORKING-MODELS WORKPLACE AFFECT

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Chapter 1: Introduction

1. Background

The workplace brings out a wide variety of emotions in all of us, many of them deeply felt. When they are positive, they offer us some of the most gratifying experiences of our lifetimes. Likewise, when they are negative, they can represent some of the most vexing and hurtful experiences we endure' (Muchinsky, 2000, p. 803)

There is growing recognition by organisational researchers that the workplace is an emotional environment (Ashkanasy, Hartel & Daus, 2002). In the course of our daily work lives we may experience a diverse range of emotions, both positive and negative, that vary considerably in intensity – from extremes of anger or happiness, to the mildest feelings of frustration or interest (Muchinsky, 2000). The focus of this thesis is on negative emotions at work. In the present context, the term 'negative emotions' refers to discrete negative affective reactions (e.g. anger, guilt), or combinations of them, that occur in response to real or imagined events at work. The precise nature, causes, and consequences of negative emotions have so far received little attention. However, there are preliminary indications that negative emotions may have adverse consequences for both individuals and their organisations. For individuals, the accumulation of negative emotional experiences may lead to physical and psychological ill health, including burnout, especially if the individual is unable to deal effectively with the source of negative emotions (Buunk, De Jonge, Ybema & De Wolff, 1998; Kahn, 1993). In terms of organisational consequences, negative emotions at work have been associated with lower job satisfaction and motivation, higher turnover, and an increase in counterproductive work behaviours (Fisher, 2000; George & Brief, 1996; Kahn, 1993; 1998; Spector & Fox, 2002).

There are potentially innumerable sources of negative emotions in the workplace (Fisher, 2002) but, from the limited research available, the most frequently cited cause is working relationships (Basch & Fisher, 2000; Waldron, 2000). Employees may interact with a range of other people during the course of the working day, for example, co-workers, supervisors, and customers. Therefore, potentially any interaction within any working relationship could evoke negative emotions. However, the relationship with the greatest potential for generating negative emotions is the supervisory relationship. Basch and Fisher (2000) asked employees to describe events that had led to positive and negative emotions at

work and found that the actions of managers or supervisors led to negative emotions 93% of the time. In contrast, actions of colleagues led to positive emotions 25% of the time and negative emotions 75% of the time. Clearly then, the supervisory relationship may be a major source of negative emotions at work. To date, however, we lack the theory and empirical evidence to explain why this is so (Brief & Weiss, 2002). It is this gap that the thesis seeks to address.

2. Research Aims

The overall aim of the research is:

- To use attachment theory (Bowlby, 1969; 1973; 1980) as a framework for understanding the nature and causes of employee negative emotional experiences, in the context of supervisory relationships

Based on attachment theory, the supervisory relationship is conceptualised as a significant interpersonal relationship in which employees develop differing working models (beliefs and expectations) based on the quality of ‘caregiving’ they receive from their supervisors. In turn, it is proposed that these relationship-specific working models either independently, or in interaction with more stable individual differences (global working models), guide employees’ interpretations and emotional responses in interactions with their supervisors. (Note that, for the purposes of this research, the term ‘supervisor’ is used broadly to refer to the individual who is viewed by an employee as their ‘boss’ or manager. Depending on the structure of an organisation the ‘supervisor’ could therefore be a team leader, department head, line manager etc.) In order to achieve the overall aim, the research was carried out in three stages, each with a more specific aim(s):

Stage 1 - development of a supervisor caregiving scale (SCS). In the absence of suitable existing measures, a scale assessing employee perceptions of supervisor caregiving was required before the main research could be conducted. The aim of this stage was:

- To use attachment theory as a guide to develop a scale measure of supervisor caregiving

Stage 2 - a cross-sectional questionnaire survey. A survey was conducted to gather data with which to test the proposed attachment theoretical model(s) of employee negative emotions, with reference to hypothetical supervisory relationship events. Specifically the aims were:

- To replicate and extend the findings of Stage 1 regarding the link between supervisor caregiving and relationship-specific working models of attachment (avoidance and anxiety)
- To investigate the effects of supervisor caregiving and attachment working models (specific and global) on employees' cognitive and emotional reactions in their supervisory relationships

Stage 3 - follow-up interviews. Interviews, with a sub-sample of the survey respondents, were designed to enhance and extend the survey findings, with reference to employees' actual emotional experiences in their supervisory relationships. The aim was:

- To obtain an in-depth, qualitative understanding of the roles of supervisor caregiving, and specific attachment working models, in employees' 'real-life' experiences of negative emotions in their supervisory relationships

3. Overview of Thesis

Chapter 2 reviews the literature on emotions at work. The purpose of the chapter is to position the current research in the context of what we know, and what we do not know, about emotions in the workplace, particularly negative emotions. To this end, the main trends in research on emotions at work are reviewed and evaluated for their utility in explaining negative emotions in supervisory relationships. It is concluded that theory and research on mood, emotional intelligence, and emotional labour say little about what people actually feel at work and why. It is argued that research on the nature and causes of negative emotions at work has been relatively neglected. The limited existing research in this area is reviewed, and the need for a truly 'relational' theory of negative emotions in supervisory relationships is highlighted. It is suggested that drawing on attachment theory enables the construction of such a relational theory.

Having positioned the research, Chapter 3 is the first of two further literature review chapters designed to elaborate the proposed attachment theoretical perspective of employee negative emotions in supervisory relationships. This chapter deals with the attachment-related building blocks of the research framework that is discussed in full in Chapter 4. Thus, the chapter introduces the key principles of attachment theory, charting its origins in the child development literature and its subsequent application to understanding thoughts, feelings, and

behaviour in adult relationships. The concepts of specific and global working models are presented, and the role of caregiving in their development is discussed. Based on the review, it is argued that the supervisor role can be conceptualised as a caregiving role, and employees develop differing specific working models in their supervisory relationships depending on the quality of caregiving they receive.

Chapter 4 reviews the literature concerning the role of attachment working models in determining individuals' cognitive and emotional reactions to events. Two research models are presented: the main framework for the research (the 'Independent Effects' model), and a variation of the main model (the 'Interaction' model). In the Independent Effects model, it is proposed that specific and global working models jointly but independently predict the way that supervisory relationship events are interpreted and responded to emotionally. In the alternative Interaction model it is suggested that the influence of relationship-specific working models on event interpretation is moderated by the effects of global working models. The chapter ends with a summary of the literature review and the benefits of adopting the proposed attachment theoretical perspective of negative emotions in supervisory relationships.

Chapter 5 provides an overview of the research design and hypotheses for the research. The intention of this chapter is to provide an orienting framework for the rest of the thesis. To this end, the aims, rationale, design, research questions and hypotheses for each of the three stages of the research are summarised. The research questions and hypotheses are based on the literature review, and guided by the proposed research model(s). More detailed consideration of the methodological issues associated with each study are reserved for discussion in later chapters.

Chapter 6 describes the two studies that were conducted in order to develop a scale measure of employee perceptions of supervisor caregiving – the Supervisor Caregiving Scale (SCS). Both studies are included in the same chapter because they are closely connected and together form Stage 1 of the research. The scale was necessary to enable the main investigation into employee negative emotions. The chapter provides details of the methods used to generate, select, and validate scale items in Study 1. Following this, Study 2 is described. Here, the scale was slightly modified and further validation research was undertaken. The chapter ends with a discussion of both studies. It is concluded that the SCS shows good reliability and validity, although the factor structure requires further

investigation. It is also concluded that the studies provide preliminary correlational support for the proposed link between supervisor caregiving and specific working models.

Chapter 7 describes the methods and procedures used in conducting Stage 2 (Study 3) of the research. Study 3 was a cross-sectional questionnaire survey designed to gather quantitative data that would enable empirical testing of the research model(s). After recapping the aims and research questions for the study, details are given of the research setting (a UK NHS Trust) and the sample (183 nurses). It is argued that because nurses work under stressful conditions, the effects of attachment working models should be more pronounced, and the hypothesised effects on cognition and emotions should be more likely to be observed. The chapter also describes access negotiation, and preparation and administration of the survey. Full details of the measures included in the questionnaire are provided. Details of confirmatory factor analysis of the SCS, conducted as a precursor to further analysis of the Study 3 data, can be found at the end of the chapter. It is concluded that SCS items have acceptable fit as a single dimension, thereby resolving an issue outstanding from Stage 1.

Chapter 8 contains the results and discussion for Study 3. First, the steps taken to prepare the data, and the preliminary statistical analyses are described. Then, the strategy for the main analysis is explained. Specifically, because participants worked together in various wards, and therefore some shared the same supervisors, it was necessary to use Multilevel Random Coefficient (MRC) analysis to remove group-level influences on individuals' responses. The chapter then presents the results of the MRC analysis that was conducted to test the hypotheses relating to the Independent Effects and Interaction models. The chapter closes with a discussion of the findings, with reference to the attachment theory literature. Overall, partial support was found for the Independent Effects Model, but no support was found for the Interaction Model. It is noted that a limitation of the study is that it was based on imagined responses to hypothetical supervisor actions.

Chapter 9 describes the methods and procedures used in conducting Stage 3 (Study 4) of the research. Study 4 involved semi-structured interviews with a sub-sample of nurses (N = 24) from Study 3, selected on the basis of their specific working model scores. Interviews were designed to collect information about securely and insecurely attached nurses' actual emotional experiences in their supervisory relationships, thereby addressing a shortcoming,

and enriching the findings, of the previous study. The chapter recaps the aims and research questions for the study. Then, the design and implementation of the interviews are described. The care taken to ensure that individuals were interviewed ‘blind’ (i.e. without prior knowledge of their specific working models) is emphasised. The final section of the chapter details how the interview material was coded and analysed using template (thematic) analysis.

Chapter 10 contains the results and discussion of the qualitative analysis of the Study 4 interviews. The findings are presented in three main sections. The first concerns nurses’ reports of the nature and impact of the supervisor caregiving they received. The second section compares the types of negative supervisory relationship events experienced by nurses with different specific working models, and the attachment themes underlying these events. The third section presents the cognitive, emotional, and relationship outcomes associated with the negative events. The findings are illustrated with quotes taken from the interview transcripts. The chapter ends with a summary and discussion of the findings with reference to existing theory and research. Relative to secure individuals, people with insecure (anxious or avoidant) specific working models reported poorer quality supervisor caregiving, more negative relationship events, and more frequent negative emotions. Anxiety and avoidance were associated with different event themes, patterns of cognition, and emotional reactions. It is concluded that, in general, the findings support and enhance the findings of Study 3, and are consistent with attachment theory predictions overall.

Chapter 11 is the concluding chapter of the thesis. The main findings from the three stages of the research are summarised and integrated, and it is concluded that overall, the findings broadly supported the predictions. It is argued that the research contributes to knowledge in the domain of emotions at work. In particular, the Independent Effects Model and SCS show promise as tools that can help predict employee negative emotions in supervisory relationships. In addition, it is argued that the research extends current operationalisations of attachment theory, and has implications for leadership theories. The research is not without some weaknesses and these, together with ideas for future research, are considered here. The research also has practical implications for managers wishing to reduce the costs of negative emotions for their employees and organisations as a whole. An example of a training programme incorporating the principles of supervisor caregiving and the SCS is outlined. Finally, it is concluded that the research represents a preliminary step

towards understanding the nature and causes of negative emotional experiences in supervisory relationships, within a relational framework. However, much more research is needed.

Chapter 2: Emotions in the Workplace

This chapter reviews the literature on emotions at work. The current research seeks to understand the nature and causes of employees' experiences of negative emotions, in the context of their supervisory relationships. Very little existing research addresses this topic. The goals of the chapter are a) to position the research in the wider context of what we know, and what we do not know about emotions at work, particularly negative emotions; and b) to evaluate the utility of existing theory and research for the purposes of the present research. To this end, the chapter begins with a discussion of the relative neglect of the study of emotions in the workplace. Then, the differences between mood and emotion are clarified. Next, the key trends in the workplace emotions literature are briefly reviewed, and their relevance for understanding the nature and causes of negative emotions in supervisory relationships is assessed. Finally, the limited theory and research concerning the antecedents of negative emotions at work are discussed, and evaluated with regard to their implications for the present research.

1. The Neglect of Emotions in Organisational Research

As recently as ten years ago, Pekrun and Frese (1992) and Fineman (1993) lamented the almost total lack of attention that organisational researchers had given to the issue of emotions at work. The absence of literature on the subject at that time was attributed to deep-rooted, traditional assumptions about the nature of successful organisations and individual performance (e.g. Fineman, 1993). Specifically, within efficient, mechanistic organisations (c.f. Morgan, 1986) effective individuals were characterised as rational, logical decision makers. Emotions were unwanted influences that clouded pure, rational thought. As such, emotions needed to be contained and controlled – to be emotional was to show signs of weakness and unreliability (Muchinsky, 2000). Thus, in 'good' organisations, the dominant view was that 'cool, clear strategic thinking is not to be sullied by messy feelings...good organizations are places where feelings are managed, designed out, or removed' (Fineman, 1996, p.545).

Increasingly, this view has been challenged, with many authors asserting that emotions are prevalent in the daily work experiences of all employees (e.g. Briner, 1999; Fineman, 1993; Weiss & Cropanzano, 1996). Indeed, Fitness (2000) argued that the workplace is one

of the most interpersonally frustrating environments that people are likely to encounter. In support, she found that anger was frequently experienced at work. In addition, Basch and Fisher (2000) found that employees were easily able to recollect recent, work-based instances of frustration, worry, annoyance, anger, unhappiness, and disappointment.

There is also growing recognition of the consequences of emotions at both the individual and organisational level. For example, McColl-Kennedy and Anderson (2002) found that frustration predicted lower sales performance. In another study, envy of one's co-workers was associated with perceptions of lower job control, which has implications for well-being (Vecchio, 2000). Negative emotions have also been shown to negatively predict job satisfaction, and positively predict counterproductive work behaviours (Fisher, 2000; Spector & Fox, 2002). Finally, emotions may influence motivation, with consequences for individuals' choice of work activities, effort expenditure, and persistence in the face of obstacles (George & Brief, 1996).

Despite this recent acknowledgement that emotions play an important role in working life, the fact remains that precious little is known about what people actually feel when they are at work, and why (Brief & Weiss, 2002; Briner, 1999; Fineman, 1993; Muchinsky, 2000). This is especially the case for negative emotions (Fineman, 1993; Vecchio, 2000). The introduction to this thesis highlighted that the supervisory relationship is expected to be a rich source of negative emotional experiences. However, theory and research on this topic is at best 'embryonic' (Brief & Weiss, 2002). This gap in our knowledge may be due in part to the fact that researchers interested in the role of 'feelings' at work have so far tended to concentrate their efforts in the areas of mood, emotional labour, and emotional intelligence. The remainder of the chapter provides a brief overview of these main approaches, in addition to discussing what little is known about the antecedents of negative emotions at work. First however, it is necessary to provide conceptual clarification regarding the distinction between emotion and mood because the terms are often confused (Weiss & Cropanzano, 1996).

2. Emotion and Mood

Emotions have long eluded precise or concise definition. Nevertheless, there is consensus regarding the core components of an emotional experience. According to emotion

theorists (e.g. Frijda, 1988, 1993; Lazarus, 1991a; Russell & Feldman Barrett, 1999) an emotion typically consists of:

- An irreducible feeling (affective) component – involving the subjective experience of oneself as having a specific emotion (e.g. being angry)
- An object-specific component – emotions are always reactions to a particular person, event, or thing, which may be real, recollected, or anticipated
- A cognitive component – involving attention toward, appraisal, and evaluation of the object or event
- A physiological component – including various neural and chemical changes in the body (e.g. fear is associated with elevated heart rate and perspiration)
- An action tendency component – including goal-directed plans to react adaptively

The multi-faceted nature of emotions is thought to stem from the fact that they are highly functional experiences and, from an evolutionary perspective, essential to human survival. Specifically, emotions are thought to be innate, adaptive mechanisms that focus attention, provide information about relevant aspects of the environment (e.g. danger), and prepare the body for rapid reactions if necessary (Frijda, 1988).

Moods are most easily defined in terms of the extent to which they differ from emotions. Principally, mood and emotion differ in terms of their duration, intensity, frequency, and object-specificity (Ekman, 1994; Frijda, 1993; Morris, 1989). Generally, emotions are experienced as intense affective states, while moods are relatively mild in comparison. Both emotions and moods can vary substantially in duration but emotion episodes tend, on average, to be relatively short-lived. In contrast, moods are often (but by no means always) experienced as longer lasting, although they may fade in and out of conscious awareness. Emotions are experienced less frequently than moods. For example, in a diary study of emotions in daily life, Oatley and Duncan (1994) found that individuals reported an average of just one emotion episode (i.e. a true emotional reaction) per day. Moods, on the other hand, are constantly present in some form during everyday waking life (Clark & Watson, 1994). Finally, as already noted, emotions are usually activated in response to an object or event. Mood, however, is not so much a reaction to a specific event as a vague summary of an individual's affective state at a given point in time (Lazarus, 1991a).

Evidently there are clear differences between the subjective experiences of mood and emotion. However, despite the distinctions, it is also important to keep in mind that emotion and mood are in practice related experiences. According to Ekman (1994) moods can be viewed as providing a constant affective backdrop on to which emotional experiences are super-imposed. Moreover, emotions can feed in to moods. For example, over time individuals habituate to an emotion, and the focus on the eliciting event dwindles. As a result, the intensity of the original emotion fades but the feeling may persist in milder form as a lingering mood (Frijda, 1988; 1993).

Thus, overall, emotions and moods can be viewed as distinct but overlapping instances of the broader psychological construct known as state (i.e. transient) affect (Weiss, 2002). Affective states are in turn distinct from trait affect (or ‘affectivity’), which refers to an individual’s stable dispositional tendency to experience generally more positive or negative affective states (Watson & Clark, 1984). Gray and Watson (2001) suggest that the relationships between emotion, mood, and affectivity are best represented in a hierarchical model. At the top of the hierarchy are positive and negative affectivity – the emotional dispositions employees bring to the workplace; the middle tier contains background mood states (e.g. irritable, cheerful); and the bottom tier contains specific emotions (e.g. anger, pride).

Precisely which moods and emotions should be listed in the hierarchy is a matter of debate. Within the mood domain, mood is operationalised in terms of a small number of dimensions (usually two) that are believed to underlie all affective experiences (Larsen, Deiner & Lucas, 2002). Two alternative structures are proposed. One model proposes the bipolar dimensions of *pleasure-displeasure* (e.g. ranging from happy/cheerful to unhappy/sad) and *activation/arousal*, which represents a continuum from sleepiness to extreme arousal (e.g. Russell, 1978; Russell & Feldman Barrett, 1999). According to the second model, mood states can be better represented in terms of the dimensions of Positive Affect (PA) and Negative Affect (NA) (e.g. Watson & Tellegen, 1985). High PA is associated with enthusiasm and energy, while low PA indicates absence of positive affect as manifested by relative tiredness, boredom and apathy. High NA denotes feelings of anxiety, anger, and irritability, for example. Low NA is associated with the absence of negative affect in the form of feeling relaxed and content. While the models may appear different on the surface, both are simply different factor solutions, or rotations, of the same data. As such both models can

be accommodated in a single, all-encompassing Circumplex Model (see Larsen & Deiner, 1992 for a review). However, it is the PA/NA approach that has been most widely adopted in organisational research (Larsen, Deiner & Lucas, 2002). This may partly be due to the availability of an extensively validated (Watson, 1988) self-report mood measure known as the Positive and Negative Affect Schedule, or PANAS (Watson, Clark & Tellegen, 1988).

Whereas mood researchers conceptualise affective experience in terms of a minimum number of underlying dimensions, emotion researchers have sought to identify sets of discrete, 'basic' emotions, that is, the core experiences from which all other emotions are derived (Weiss, 2002). Different researchers have generated different lists of between five and nine basic emotions, based on criteria such as universality, or the uniqueness of the subjective experience and associated facial expression (Larsen, Deiner & Lucas, 2002). From an evolutionary perspective, Ekman (1992) argued that fear, anger, sadness, disgust, joy, and surprise were the most useful for survival, and therefore they are the key primary emotions. However, cognitive appraisal theorists argue that it is more fruitful to categorise emotions into broader families according to the type of event appraisal, or 'core relational theme' that is common to each class of emotion (e.g. Lazarus, 1991b; Ortony & Turner, 1990). Regardless of the approach, Weiss and Cropanzano (1996) and others conclude that there is a fair degree of overlap between the various emotion models, with theorists generally converging on anger, disgust, fear, sadness, joy, and surprise as core, discrete emotions that subsume clusters of related emotional experiences (e.g. anger subsumes annoyance, rage etc.).

A key point to note is that the notion of basic, or discrete, emotions would seem to imply that individuals respond to an event with a single emotion, but this is not the case (Oatley & Duncan, 1992). In reality people often react to events with a combination of emotions. Oatley and Duncan's (1994) diary study of emotions in daily life revealed that over a third of emotional experiences were mixtures of basic emotions (e.g. anger plus disgust or guilt). The authors speculated that this might be the result of making more than one interpretation of the event, and/or experiencing a secondary emotion caused by the experience of the first emotion (e.g. guilt at feeling angry). Lazarus and Cohen-Charash (2001) offer a slightly different perspective on mixed emotions. They argue that while emotions occur in combination, there is usually a dominant emotion, such that an individual could describe their overriding feeling (e.g. anger) and the associated core relational theme (appraisal/interpretation). Taken together, this suggests care is needed when researching the

nature and incidence of emotions in the workplace. For example, while it may be intuitively appealing to investigate the degree to which certain events cause anger at work using an anger scale, or even a single item measure, researchers should anticipate a broader range of emotional reactions and design their measures accordingly (Lazarus & Cohen-Charash, 2001).

In sum, emotions and moods are related yet conceptually distinct phenomena. The present research focuses on emotions only, and negative emotions in particular. Furthermore, based on the above discussion, it is assumed that negative emotional episodes may comprise multiple negative emotions, each of which may be experienced at varying degrees of intensity.

3. Main Research Trends

Current trends in research on emotions in the workplace can be divided into mood research, and research on emotional labour and emotional intelligence. Emotional labour refers to the appropriate display, or control, of emotional expression in the service of one's job. Emotional intelligence refers to an individual's ability to understand and manage their own, and others', emotions. Mood research is included here because some researchers argue that all emotions can in fact be reduced to, and measured by, the mood dimensions discussed above (c.f. Larsen & Deiner, 1992). Other researchers simply do not differentiate between the constructs and subsume emotions and/or moods under the general heading of 'emotions' or 'affect' (Brief & Weiss, 2002; Gray & Watson, 2001). Each of the three approaches is discussed below. Note that the aim is simply to provide an overview of theory and research in each area, so the review is necessarily selective. At the end of the section, the limitations of these approaches for the present research are outlined.

3.1 Mood Research

The vast majority of research purporting to examine employee feelings in the workplace has investigated the causes and consequences of mood, generally operationalised as state positive and negative affect (PA/NA) (Brief & Weiss, 2002). Much of the research concerning the antecedents of mood states is concentrated in the occupational stress literature. In particular, studies have attempted to identify a range of work characteristics that predict negative mood, including multiple role juggling, negative work events, interpersonal

frustration, and job overload (e.g. Hart, Wearing & Headey, 1995; Peeters, Buunk & Schaufeli, 1995; Williams, Suls, Alliger, Learner, Wan, 1991). A notable feature of this research is that it usually employs diary or experience-sampling methodologies in an effort to capture real-time experiences. For example, Zohar (1999) conducted a time-series analysis of the impact of daily occupational hassles on military parachute trainers' end-of-day mood. Over a four-week period, an expert (the senior trainer) independently rated the nature and severity of occupational hassles that the trainers had encountered during the day. Hassles included events such as transportation delays, communication breakdown, missing equipment, trainees' errors, administrative hassles etc. Trainers rated their mood prior to going to bed each night, using PANAS. The results showed that hassle severity significantly predicted end of day negative mood. In another study, using an experience sampling technique in which accountants rated their moods at intervals during the working day, Teuchman, Totterdell, and Parker (1999) found that perceived time pressure was associated with negative mood.

Another noteworthy stream of research on the causes of mood deals with the concept of *emotional contagion* (Hatfield, Cacioppo & Rapson, 1994). The basic proposition of the theory is that we 'catch' other peoples' emotions (or more specifically, moods) when we interact with them. Specifically, when individuals interact with another person, they automatically and unconsciously mimic their interaction partner's expressive behaviour. Feedback from the imitation process in turn results in individuals experiencing the affective state that they have unconsciously imitated (Hatfield, Cacioppo & Rapson, 1994). There is evidence to suggest that emotional contagion has implications for the workplace. For example, in a laboratory study, Lewis (2000) demonstrated that when leaders expressed anger, it produced a corresponding negative mood state in observers. In a field study, positive displays of emotion by bank clerks were associated with higher levels of positive mood in their customers (Pugh, 2001). Other researchers have also demonstrated the operation of emotional contagion in work groups, with associated effects on group performance (e.g. Barsade, 2002; Kelly & Barsade, 2001).

The consequences of mood in the workplace have been investigated in terms of the implications for performance-related behaviours such as creativity and decision-making; organisational citizenship behaviours; organisational withdrawal behaviours; and job satisfaction. For example, positive mood has been shown to facilitate creative problem solving in samples of doctors (Estrada, Isen & Young, 1994; 1997). In addition, when

individuals experience positive moods, they tend to be faster and more purposive in making decisions (Nygren, Isen, Taylor & Dulin, 1996), although the result may not be the most appropriate decision (Daniels, 1999). Using a diary study, Weiss, Nicholas and Daus (1999) found that average levels of pleasant mood over 16 days significantly predicted job satisfaction, over and above the effects of dispositional positive affect. Fisher (2000) reported similar and stronger results between mood and job satisfaction using an experience sampling approach and a non-verbal mood scale requiring respondents to select the picture of a face (ranging from unpleasant/unhappy to pleasant/happy) that best matched their mood. Research also shows that positive moods are associated with more pro-social behaviours and organisational citizenship intentions, as measured by both self-report and independent ratings (e.g. George, 1991; Williams & Shiaw, 1999). Finally, while positive mood is negatively associated with turnover (Shaw, 1999), people experiencing negative moods at work over time are more likely to be absent and leave their jobs (Pelled & Xin, 1999).

3.2 Emotional Labour

Another key approach to the study of emotions at work is concerned with the expression, or display, of appropriate emotions as required by the nature of the job. This research stems from Hochschild's (1983) influential book, *The Managed Heart*. Based on observations and interviews with flight attendants, she concluded that individuals working in service roles are subject to strong organisational norms and expectations regarding the display of emotions at the customer-organisation interface. Regulated displays of emotions are required in such roles in the belief that role effectiveness, and hence productivity, will be enhanced. Indeed, research supports the link between displays of positive emotions (e.g. displaying happiness by smiling) and subsequent sales and customer evaluations (e.g. Pugh, 2001; Sutton & Rafaeli, 1988). Hochschild (1983), as a sociologist, referred to the process of managing emotional expression in the service of the job (i.e. for a wage) as 'emotional labour'. More recent psychological definitions shift the emphasis away from the economic aspects of the construct to focus predominantly on intra-individual processes. Thus, Morris and Feldman (1996) defined emotional labour as the 'effort, planning, and control needed to express organisationally desired emotions during interpersonal transactions' (p. 987). In the light of this theoretical refinement, Zapf (2002) suggests that the term 'emotion work' better encapsulates the current conceptualisation of the construct.

Early research on emotional labour/work was largely conducted from a sociological perspective, using qualitative methodologies. This work provided in-depth case studies describing emotional labour in a range of service occupations, including sales assistants (Rafaeli & Sutton, 1990; Sutton & Rafaeli, 1988), Disneyland ride operators (Van Maanen & Kunda, 1989), bank clerks (Wharton, 1993), and debt collectors (Sutton, 1991). A central aim of the research was to illuminate the organisational determinants of emotional display rules. According to Rafaeli and Sutton (1987) organisations establish and maintain formal and informal norms regarding expressed emotions using three mechanisms:

- recruitment and selection - employing people who already 'fit' the normative emotional prototype
- socialisation practices – including formal channels such as training (e.g. 'you must always smile at the customer'), and informal channels such as peer social interaction both on and off the job
- reward systems – involving reinforcing appropriate displays of emotion (e.g. bonuses for sales assistants 'caught' being friendly to mystery shoppers)

Thus, the rules concerning which emotions are expressed, or suppressed in the workplace are governed by organisational culture, and 'any attempt to manage culture is therefore also an attempt to manage emotion' (Van Maanen & Kunda, 1989, p. 46).

More recently, work and organisational psychologists have applied the concept of 'emotion work' to the study of individual well-being in all 'person-related' jobs, that is, jobs involving frequent face-to-face or voice-to-voice interaction (Zapf, 2002). Given that the majority of former studies were qualitative, much of the preliminary research has focused on operationalising emotion work, and developing psychometrically robust measures of the construct (e.g. Grandey, 2000; Kruml & Geddes, 2000; Mann, 1999; Morris & Feldman, 1996; Zapf, Vogt, Seifert, Mertini & Isic, 1999). Currently there seem to be almost as many different measures of emotion work as there are studies. However, most operationalisations include notions of the effort required to manage one's emotional display, and the degree of emotional dissonance experienced. Emotional dissonance occurs when employees are required to express emotions that are different from what they actually feel (Zapf et al., 1999).

Studies have shown that high emotional dissonance is associated with emotional exhaustion, and in fact may be a more important contributor to burnout than perceived job demands and job control (Kruml & Geddes, 2000; Heuven & Bakker, 2003; Zapf et al.,

1999). Other research indicates that not everyone is affected in the same way by emotion work. For example, a survey of market research employees by Schaubroeck and Jones (2000) revealed that greater perceived demands to express positive emotions (i.e. degree of emotion work) predicted negative health outcomes. However, this relationship was moderated by job involvement and organisational identification. Presumably, emotional dissonance, and therefore the need to 'fake it', is reduced under these circumstances because there is a closer match between individual and organisational emotion norms. Such findings have led to calls for emotion work to be viewed as a key construct in stress research (e.g. Zapf, et al. 1999). Overall however, research in this area is still in its early stages, with many questions remaining concerning the nature, antecedents, and consequences of emotion work (Ashkanasy, Hartel & Daus, 2002).

3.3 Emotional Intelligence

The third, and perhaps most controversial area of research on emotions at work is emotional intelligence. Mayer, Dipaolo, and Salovey (1990), and Salovey and Mayer (1990) first coined the term *emotional intelligence* (EI) to refer to individual differences in the ability to reason about one's own and others emotional experiences, and respond in emotionally adaptive ways. The construct was subsequently adopted in the popular management literature, most notably in two books by Goleman (1995; 1998). Goleman (1995; 1998) defined EI as emotional awareness (of one's own and others' emotions), emotion regulation (of one's own and others' emotions), motivation, empathy, and social skills. He asserted that emotional intelligence was the most important contributor to success in work and life in general, over and above the effects of intellectual intelligence. Goleman's work was seized upon by consultants and organisations searching for 'a way of securing sustainable competitive advantage which can be developed through attention to 'people issues'' (Dulewicz & Higgs, 2000, p. 341). However, other researchers remain highly critical of Goleman's work, arguing that his conceptualisation of EI is too broad, and his exaggerated claims lack empirical foundation (e.g. Jordan, Ashkanasy, Hartel & Hooper, 2002; Salovey, Bedell, Detweiler & Mayer, 2000).

In effect, as a result of practitioner enthusiasm, emotional intelligence has been forced in to the applied setting somewhat prematurely. Indeed, organisational researchers are still debating the construct definition of EI and developing measures suitable for studying EI at

work (Ashkanasy, Hartel & Daus, 2002). Increasingly however, researchers are adopting Mayer and Salovey's (1997) definition of EI as 'the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth' (p. 5). From this platform, the concept of EI is beginning to be applied to the study of teams and leadership. For example, Jordan, Ashkanasy, Hartel, and Hooper (2002) developed a measure of workgroup emotional intelligence (the aggregate of individual members' EI) and found that team-level EI predicted the initial performance of teams. Interestingly, after a nine-week course on communication and emotional understanding, the initially low EI teams' performance rose to the level of the high EI groups. These findings support the proposed trainability of EI skills (e.g. Goleman, 1995).

Regarding leadership, at the conceptual level, George (2000) suggests high EI leaders may be more effective because they are able to develop shared goals and objectives; instil in others the importance of work tasks; encourage flexible decision-making; and generate and maintain enthusiasm, cooperation, trust, and organisational identity. Similarly, Ashkanasy and Tse (2000) discuss the parallels between EI and key aspects of transformational leadership, such as the requirement for sensitivity towards followers needs, and the ability to inspire followers (i.e. manage their affect) (e.g. Bass, 1985). Thus, leaders perceived as exhibiting a transformational style should score highly on EI (Ashkanasy & Tse, 2000).

To date, empirical research on EI and leadership is limited, probably due to the previous lack of measures of EI (Wong & Law, 2002). In one study, Wong and Law (2002) developed an EI scale and conducted a survey of Hong Kong government administrators. They found that leader EI predicted subordinate job satisfaction and organisational citizenship behaviours, although there was no significant relationship between leader EI and subordinate performance. While these findings suggest that EI is generally a positive quality leading to individual and organisational level benefits, there is also evidence to suggest that the reality may be more complex. For example, Elfenbein and Ambady (2002) found that individuals who were able to recognise, or 'eavesdrop', others' non-verbal communication of negative feelings received lower performance ratings from their superiors and colleagues. The reasons why this should be require further research but the results suggest that not all EI abilities are equally valued in the workplace (Elfenbein & Ambady, 2002).

Overall, emotional intelligence represents a growth area in the field of emotions at work. Nevertheless, it seems that if we are to achieve a full understanding of the role of EI in the workplace, there remains much work to be done regarding measurement and impact of EI on a range of work-related outcomes at the individual, team, and organisational levels.

3.4 Summary and Implications

Mood research represents a growing body of knowledge relating to the various causes and consequences of positive and negative mood states in the workplace. With the exception of emotional contagion, this research generally does not address affect in supervisory relationships. Emotional contagion research indicates that supervisors may influence their employees' background mood states as a result of expressing their own emotions during social interactions. However, it is argued that there is a marked, qualitative difference between the experiences of moods and specific emotions. A simple positive/negative affect dichotomy is therefore unlikely to capture the reality of emotional experience (Brief & Weiss, 2002; Weiss, 2002). Indeed, Basch and Fisher (2000) point out that the mood scales used in affect research mostly contain items relating to arousal/activation. Hence mood research actually tells us more about an individual's degree of tiredness or relaxation than specific emotional reactions.

Theory and research on emotional labour is concerned with the antecedents and consequences of the expression of emotions in the workplace. The evidence indicates that organisational norms may influence the display of particular emotions by employees who work in person-related jobs. Moreover, the effort involved in managing emotional displays may be detrimental for well-being. Although the role of emotional labour in supervisory relationships is not addressed, it is possible to infer that employees might actively manage the expression of their feelings when interacting with their supervisors. However, it is clear that expressed emotions are not always the same as 'felt' emotions, and there is no simple relationship between them (Rafaeli & Sutton, 1989). Thus, research on emotional labour, or the study of expressed emotions, is not especially useful for illuminating the nature and causes of negative emotional reactions (i.e. felt emotions) in supervisory relationships.

Finally, emotional intelligence focuses on awareness and control of one's own and other's emotions. Empirical research to date is limited, but preliminary evidence indicates

that the EI of leaders may influence a range of employee attitudes and behaviours. Theoretically, George (2000) proposes that leaders scoring highly on EI should be able to influence employee affect (e.g. enthusiasm), motivation, and trust. This notion appears congruent with the literature on emotional contagion. To date however, the mechanisms through which leader EI influences work-related outcomes are a matter for conjecture. Nevertheless, the emotional intelligence literature is broadly useful in the sense that it suggests supervisors may differ in the degree of sensitivity with which they treat their employees, with direct consequences for employee negative emotions.

Overall, the key approaches to researching emotions (in the broadest sense) at work offer interesting insights into the experience and consequences of mood; the role of display rules governing the expression of emotion; and individual differences in the recognition and management of emotions in oneself and others. However, this research provides no concrete information regarding the likely nature and causes of negative emotions in supervisory relationships. Effectively, by concentrating their efforts in the areas discussed above, researchers interested in emotions at work have largely neglected to conduct research on the more fundamental issue of the nature and causes of emotions. The following section presents what little is known on this topic.

4. Antecedents of Negative Emotions

As noted earlier, emotions are by definition reactions to objects or events. Accordingly, initial efforts to gain insight into the causes of emotions at work have focused on predicting and identifying the types of workplace events that are associated with specific emotions. In this section, the small body of available theory and research is discussed, with particular reference to the antecedents of negative emotions.

Affective Events Theory (AET) (Weiss & Cropanzano, 1996) was first proposed as a theoretical framework to explain the relationships in the 'black box' between the work environment and job attitudes and behaviours. Briefly, according to AET, characteristics of the work environment (e.g. roles stressors, job characteristics, supervision) determine the likelihood of occurrence of 'affective events', that is, events that lead to affective reactions (i.e. emotions and moods). Specifically, 'things happen to people in work settings, and people often react emotionally to these events' (Weiss & Cropanzano, 1996, p.11). In the

short term, affective reactions influence behaviour. Over time, the accumulation of emotional reactions and moods influence job attitudes (e.g. job satisfaction). Individual differences such as trait affectivity also contribute to the way in which events are responded to emotionally. Thus, AET suggests that emotions are the product of a combination of events elicited by the work environment, and personality factors.

To date, although a few studies have tested, and found support for, AET's propositions regarding the relationship between affective reactions and job attitudes (e.g. Weiss, Nicholas & Daus, 1999; Fisher, 2000), there has been less research regarding the 'front end', emotional antecedents part of the model. Fisher (2002) conducted an experience sampling study in which participants wore alarm watches pre-programmed to ring five times a day for two weeks. Upon hearing the alarm participants indicated on a questionnaire the extent to which they were currently experiencing each of 16 negative (and positive) emotions. The results supported AET predictions, showing that negative emotions (an aggregate of specific negative emotions) were predicted by role conflict and negative affectivity. Also consistent with the theory, cross-sectional surveys have found that leader consideration and self-esteem predict envy of one's co-workers (Vecchio, 1995; 2000), and transformational leadership predicts frequency of experienced frustration and irritation (McColl-Kennedy & Anderson, 2002). Together, these studies support the proposition that features of the work environment (e.g. conflicting demands, type of leadership/supervision) may predispose the occurrence of certain negative events, which in turn (and depending partly on dispositional factors) leads to the experience of negative emotions. Unfortunately, however, the studies do not provide any information about the precise nature of events that might be expected to occur as a result of the environmental features examined. Indeed, notably this issue is not addressed by AET – it is simply proposed (c.f. Herzberg, Mausner & Snyderman, 1959) that different types of events will cause positive and negative emotions (Weiss & Cropanzano, 1996).

In an attempt to fill this gap, Basch and Fisher (2000) conducted an open-response format survey of hotel employees, asking them to describe work-related events or situations that had caused them to experience each of ten specific emotions (positive and negative). The responses were then coded, yielding thirteen types of events associated with negative emotions (as well as fourteen for positive emotions). Basch and Fisher then constructed event-emotion matrices showing the frequency of association between type of event and specific emotions, as well as negative/positive emotions overall. The results indicated that

two types of event – acts of colleagues and acts of management – respectively caused 37% and 22% of overall negative emotions. Specifically, these two categories were the most frequent causes of disappointment, frustration, annoyance, anger, sadness, unhappiness, hurt, and disgust. No other category of event (e.g. workload, acts of customers, task difficulties) accounted for more than 7% of negative emotions overall. Clearly then, interpersonal relationships are a frequent cause of negative emotions at work. Finally, consistent with AET, Basch and Fisher observed that the events associated with positive and negative emotions were consistently different. The important implication of this finding is that interventions designed to increase the likelihood of positive events and emotions would probably not affect the likelihood of negative events and emotions. In short, it is necessary to treat positive and negative emotions as separate phenomena.

Basch and Fisher's (2000) study represents a step in the right direction. However, a major shortcoming of the event-emotion matrices is that they give only a broad indication of the work-related events that might cause negative emotions. In particular, they do not provide information regarding exactly what it is about managers' or colleagues' actions that leads to specific negative emotions, or why this should be so (Ashkanasy, Hartel & Daus, 2002). An alternative, theoretically driven approach to understanding the link between work-related events and negative emotions is suggested by Lazarus and Cohen-Charash (2001). They point to the fact that cognitive appraisal theories of emotion (e.g. Frijda, 1988; Lazarus, 1991a; Ortony, Clore & Collins, 1988; Scherer, 1984; Weiner, 1985) broadly concur that specific emotions are associated with distinctive 'core relational themes', or appraisals of events. Therefore, Lazarus and Cohen-Charash argue, it is possible to use knowledge of the core relational theme for a given emotion and work backwards, to predict the types of events that would most likely lead to the prototypical pattern of appraisals. The authors provide examples of the core relational themes and predicted events for anger, anxiety, guilt/shame, and envy/jealousy. These predictions are briefly outlined below, with reference to additional, relevant empirical research where available:

Anger – the core relational theme for anger is a demeaning offence or slight against oneself by another. Sources of anger in the workplace might therefore include negative evaluation of one's work, insulting or patronising requests, and perceptions of lack of concern or unfairness on the part of managers. Consistent with predictions concerning fairness perceptions, Fitness (2000) found that the most frequently cited source of anger for subordinates involved the

perception of unjust treatment by their managers. Similarly, a diary study by Conway and Briner (2000) showed that perceived breach of psychological contract (e.g. promises broken by the organisation) was associated with feelings of 'betrayal' as defined by several anger-related terms (e.g. anger, outrage, resentment, bitterness). Cropanzano, Weiss, Suckov, and Grandey (2000) suggest that the integration of justice theories and cognitive appraisal theories may illuminate the association between fairness and emotions at work.

Anxiety – the core relational theme for anxiety is facing an uncertain threat. Suggested sources of anxiety include any form of evaluation about one's job role or performance, organisational change, and job insecurity. There is ample evidence in the occupational stress literature indicating a clear link between such factors and anxiety when it is conceptualised more broadly as a relatively enduring facet of well-being (Kahn & Byosiene, 1992). However, research that investigates anxiety as a momentary emotional reaction to particular instances of uncertainty, or threat, in the workplace is lacking.

Guilt and shame – the core theme for guilt is transgressing a moral rule or implicit code of conduct. Shame is closely related to guilt but also involves the sense of failing to live up to internal standards or ideals. Lazarus and Cohen-Charash suggest that a team member who does not contribute fully to the group task might experience guilt and/or shame (c.f. De Dreu, West, Fischer & MacCurtain, 2001). Currently however, there is little or no empirical research on guilt or shame at work (Poulson, 2000; Walsh, 1999).

Envy and jealousy – the core relational theme for envy is desiring, and feeling unjustly deprived of, something another person has. The core theme for jealousy involves resenting another who is a rival for some anticipated or desired reward from a third person. Both envy and jealousy are possible reactions to promotion, or other favourable treatment of a colleague, for example. Evidence suggests that envy and jealousy are both prevalent at work (Vecchio, 1995; 2000). A survey by Miner (1990) revealed that 29% of employees across 200 organisations had experienced jealousy at work. As noted earlier, there is preliminary evidence of an association between considerate leader behaviours and envy (Vecchio, 1995; 2000). Again, however, there is so far no evidence concerning the specific events or behaviours that cause either jealousy or envy in the workplace.

In sum, while much empirical work is clearly needed, the core relational theme approach provides hypotheses about the association between types of events and negative emotional reactions, as well as some insight into the interpretive processes underlying the relationships. However, Lazarus and Cohen-Charash (2001) caution against a simplistic application of the approach. In particular, they emphasise that individual differences in the interpretation of events must also be taken in to account. Essentially, emotions do not arise solely from the events themselves. Rather, it is the situation as subjectively perceived that drives emotional responses (Smith & Pope, 1992). In short, 'emotions change when meanings change' (Frijda, 1988, p.350) and personality is a key factor influencing event interpretation (Lazarus & Cohen-Charash, 2001).

From the preceding discussion, event-based approaches to the study of emotion at work appear intuitively appealing for investigating employee experiences of negative emotions in supervisory relationships. The overall implication is that negative emotions might be expected to arise as a result of events, or more specifically the interpretation of events, which occur between supervisors and their employees. However, event-based approaches suffer from two key limitations. First, the focus by many researchers on specific event-emotion pairings may be misleading. It implies that only one emotional reaction is likely (allowing for individual differences), ignoring the fact that events may sometimes be reacted to with multiple and even conflicting emotions (Grandey & Brauburger, 2002; Oatley & Duncan, 1992; 1994). Second, event-based approaches do not specifically take account of the context in which the event occurs. In particular, while much of the theory and research described above suggests that negative emotions tend to occur in, and as a result of, working relationships, the impact of this relational context on event interpretation/appraisal is not considered explicitly.

According to Herriot (2001), emotional events occur in relationships – relationships in which other incidents will have occurred. Working relationships are therefore 'a function of the history of social episodes between the parties. These episodes have consisted of a series of events, in response to which the parties may have experienced different emotions. These emotional experiences will have become incorporated into their selves and their perceptions of the relationship, and hence will affect their responses in subsequent episodes' (Herriot, 2001, p.313). Consistent with a relational view of the causes of negative emotions, De Dreu et al. (2001) suggest that, to the extent that team members perceive 'real, potential, or

imagined changes in their belongingness to their work team' (p. 204) they may experience anxiety, depression, grief, jealousy, and loneliness. Taken together, this implies that the nature of the supervisory relationship in which emotion-eliciting events occur may be another important factor influencing the interpretation and experience of employee negative emotions.

5. Summary

Emotions in the workplace were, until recently, a neglected topic in organisational research. While the situation is beginning to be rectified, the majority of theory and research has tended to focus on mood, emotional labour, or emotional intelligence. These literatures provide little insight in to the negative emotions people may actually experience in relation to their supervisory relationships, or how they may occur. Event-based theories such as AET and cognitive appraisal theory point to the importance of investigating the nature and interpretation of events that are associated with emotional reactions, as well as the role of individual differences in influencing event interpretation. Additionally, it appears important to consider the effects of the relational context, or nature of the supervisory relationship, on interpretation of, and emotional reactions to, events. In short, what is needed in an integrative theory that brings together all of these elements to explain employees' experiences of negative emotions in their supervisory relationships.

In the next two chapters, it is argued that attachment theory (Bowlby, 1969; 1973; 1980) provides an ideal foundation for this integrative framework. Briefly, attachment theory is a relational theory that explains individual functioning in social relationships. The basic assumption of attachment theory is that people differ in the cognitive representations, or mental working models, that they hold for both specific relationships and relationships in general. Differences in working models are theoretically and empirically associated with differences in how people perceive, interpret, and respond to interpersonal events (Collins & Read, 1994). Thus, attachment theory may provide a useful framework for understanding employees' experiences of negative emotions in their relationships with their supervisors. In the next chapter attachment theory is examined in more detail.

Chapter 3: Attachment Theory

This chapter discusses attachment theory and how it can be applied to working relationships between employees and supervisors. Many hundreds of studies have been conducted in the areas of child and adult attachment. The goal of the chapter is not to comprehensively review all of this research. The intention of the thesis is to use attachment theory as a point of departure for building a theoretical model of employee negative emotions in supervisory relationships. This chapter is concerned with the attachment-related building blocks of the research framework that will be discussed in full in the next chapter. To this end, the chapter provides an overview of the key concepts and issues in attachment theory that are fundamental to an attachment theory perspective of supervisory relationships.

The chapter begins by outlining the origins of attachment theory in the child development literature. This is followed by a discussion of how attachment theory, especially the concept of working models, has been extended subsequently to adult relationships. Issues relating to the content, measurement, stability, and relationship-specificity of working models are included here. Based on this discussion, the construct of supervisor-specific working models is outlined. The remainder of the chapter deals with the role of caregiving in the development of working models. These ideas are then applied to the supervisor role, and the concept of supervisor caregiving is operationalised.

1. Origins of Attachment Theory

Bowlby (1969) initially proposed that attachment is an evolutionary adaptive system that develops between infants and their primary caregivers in order to maintain proximity between the infants and those who can best protect them from predators. Thus, infants are genetically predisposed to stay close to their caregivers and, in particular, to seek their help and protection when they experience distress. The attachment behaviours designed to establish and maintain proximity (e.g. smiling, crying, following) are regulated by the attachment system. The attachment system functions in a manner similar to physiological homeostasis. As such, the system is continually activated, with a state of equilibrium existing when the goals of proximity and 'felt security' are achieved to the desired degree. Activation of the attachment system is heightened by internal or external threats to proximity and security (e.g. pain, hunger, or separation from the caregiver), leading the infant to enact

behaviours that will restore equilibrium. In particular, this involves using the caregiver as a 'safe haven' to return to for comfort and reassurance.

The attachment system operates in tandem with a complementary exploratory system. The benefits of a dynamic balance between attachment behaviour and exploration can be summed up in the following way:

It is an advantageous arrangement for an infant to be activated to explore without straying too far from and adult who can protect him if he encounters danger, for him to be programmed to maintain a reasonable degree of proximity on his own account without requiring that the adult be always alert to do so, and for him to be activated to seek quickly a closer proximity or contact should he become alarmed. (Ainsworth, Bell & Stayton, 1974, p.104)

Thus, when the infant feels secure, the attachment system is relatively deactivated, allowing the child to explore and learn about the surrounding environment. At such times the attachment figure functions as a secure base of operations from which to explore (Ainsworth, 1963). Should the child become distressed, the exploratory system is overridden, and the attachment system drives the child to return to the safe haven afforded by the caregiver.

Bowlby asserted that all infants form an attachment to their primary caregivers. However, the nature of the attachment relationship is not always positive or secure. Ainsworth, Blehar, Waters, and Wall (1978) explored this issue and identified clear individual differences in the quality of attachment relationships. Specifically, they derived three infant 'attachment styles': secure, avoidant, and anxious-ambivalent based on patterns of responses observed following brief separations from primary caregivers. The separations (part of a technique known as the Strange Situation) were designed to be mildly stressful, thereby activating the infant attachment system and enabling observation of attachment-related behaviours. Secure infants showed some distress when their caregivers left the room, and immediately sought proximity and physical comfort with them when they returned. Secure infants were usually quickly soothed by their caregivers and soon returned to play (i.e. exploration). Conversely, avoidant infants showed little apparent distress upon separation from their caregivers, and ignored or avoided them upon their return. Instead of seeking proximity, these infants continued to play, albeit in an inhibited manner. All the while they remained watchful and wary of their caregivers. Anxious-ambivalent infants were very distressed upon separation from their caregivers, and although they sought proximity upon reunion, they then angrily resisted being picked up or held. They were difficult to pacify and

reluctant to return to play. Thus, anxious-ambivalence was marked by a combination of dependence and resistance.

Ainsworth et al. suggested that these characteristic patterns of attachment behaviour were the product of infants' expectations, or cognitive representations, of how their caregivers would respond to them in times of distress. In other words, based on repeated experiences with their caregivers, infants anticipated that what had happened before was likely to happen again, and they responded accordingly. In the case of the avoidant and anxious-ambivalent infants, Ainsworth et al. concluded that they had developed defensive or insecure patterns of behaviour in order to cope with negative expectations of their caregivers' responses in times of need (we return to this issue in more depth later in the chapter). In sum, individual differences in infant attachment styles were conceptualised as the outward expression of underlying differences in mental representations of attachment relationships.

Bowlby (1973) elaborated on Ainsworth et al.'s work to propose that, through experiences with various attachment figures during childhood and adolescence (e.g. parents, siblings, grandparents, best friends) individuals develop internal 'working models' of the social world that represent how the self and others are likely to act in any relational context. Two models are formed: a model of self, concerning beliefs about self-worth; and a model of other, or generalised beliefs and expectations about the warmth, responsiveness and dependability of other people:

In the working model of the world that anyone builds, a key feature is his notion of who his attachment figures are, where they may be found, and how they may be expected to respond. Similarly, in the working model of the self that anyone builds, a key feature is his notion of how acceptable or unacceptable he himself is in the eyes of his attachment figures. (Bowlby, 1973, p.91)

These cognitive representations regulate the attachment system because they help individuals predict the likely outcomes of social interaction, especially in times of distress or need. Working models are carried forward into adult life and continue to serve as guides structuring how individuals think, feel, and behave in subsequent close relationships. Thus, Bowlby believed that, once formed, working models of attachment (or attachment styles – the terms are often used interchangeably) assist social functioning and adaptation throughout the lifespan.

2. Attachment in Adult Relationships

Despite Bowlby's contention that the working models developed during individuals' formative years continue to be influential in adult life, it was some time before researchers explicitly addressed this issue (Feeney, 1999). In a seminal paper, Hazan and Shaver (1987) reported evidence supporting the application of attachment theory to adult romantic relationships. Hazan and Shaver predicted that the three patterns of attachment identified in infants by Ainsworth et al. (1978) should also be evident in the way individuals think, feel, and behave in close relationships later in life. They developed a measure of adult attachment styles by extrapolating from, and 'translating', Ainsworth et al.'s infant attachment styles. Respondents completed this measure alongside a battery of measures concerning general attitudes and past experiences in close relationships. Results indicated that the prevalence of each attachment style in adults was equivalent to that observed among infants: 56% of adults reported themselves as secure, while the proportions of anxious-ambivalent and avoidant individuals were 19% and 25% respectively. There were no sex differences associated with attachment styles, suggesting that the different relational styles were not simply manifestations of gender stereotypes. Consistent with attachment theory predictions, adults with different attachment styles reported significant differences in their experiences of close relationships. For example, secure individuals tended to report romantic relationships characterised by happiness, trust, and friendship. Avoidant individuals reported jealousy and a fear of intimacy, in their romantic relationships. For anxious-ambivalent individuals, romantic relationships involved obsession, extreme affect including jealousy, and a strong desire for reciprocation of their feelings. The different attachment styles were also associated with different mental models of self and others. Thus, secure individuals thought themselves well-liked and others generally kind-hearted. Anxious-ambivalence was associated with more self-doubts and feelings of being misunderstood and under-appreciated. Others were believed to be less willing to commit to a relationship. Finally, avoidant individuals fell between the secure and anxious-ambivalent extremes, but were distinguished by an item indicating that they could get along well without close relationships.

Other researchers quickly sought to replicate and extend Hazan and Shaver's (1987) study (e.g. Bartholomew & Horowitz, 1991; Collins & Read, 1990; Feeney & Noller, 1990). From this research, a consistent picture of adult attachment emerges. Specifically, each attachment style is characterised by relatively coherent and stable patterns of emotions,

appraisals and behaviours in close relationships, reflecting underlying working models of self and others. Secure attachment to a relationship partner indicates feeling comfortable with closeness in the relationship without fear of rejection. The corresponding mental models represent the self as worthy of love and acceptance, and other people as generally available, trustworthy, and well-intentioned. Anxious-ambivalent attachment is associated with a 'preoccupying' desire for very close relationships and a fear of rejection or abandonment. The self in the working model is viewed as having little control over important relationship matters, while others are viewed as complex and generally acting inconsistently. The third style, avoidant attachment, relates to a dislike of closeness and having to depend on others. Others are considered neither trustworthy nor dependable, and the self is viewed as autonomous (not needing closeness in order to be happy), or unworthy of closeness.

Hazan and Shaver (1987; 1994) argued that the attachment bonds formed in adulthood are rooted in the same biological and evolutionary processes that have been attributed to childhood attachment. Notably however, the evolutionary aspects of the theory have tended to be de-emphasised by most researchers of adult attachment in favour of an emphasis on the nature and role of working models. The next chapter will focus specifically on how working models are believed to influence relationship experiences, especially emotions. The remaining sections in this chapter focus on the nature and scope of working models in adult relationships, and the processes by which they may be formed.

2.1 The Components of Working Models in Adult Relationships

Although there is consensus that attachment styles are rooted in individual differences in working models of self and others, researchers have only recently begun to clarify the concept of working models in the adult attachment literature (Collins & Allard, 2001). Collins and Read (1994) and Shaver, Collins and Clark (1996) provide a more elaborate conceptualisation of the content of adult working models. They propose that adult mental models are more complex and differentiated than childhood models because they must incorporate a greater variety of relational experiences. In particular, Collins and her colleagues suggest that working models of self and others comprise four interrelated components: memories; beliefs, attitudes, and expectations; attachment-related goals and needs; and plans and strategies. Individual differences in attachment styles can be defined according to differences in the content of these components. A brief outline of the components is given below:

Memories – autobiographical memories are stored in long-term memory based on actual experiences of attachment-related relationship interactions, as well as the constructions and explanations made for one's own and others' behaviour. Secure individuals are expected to report more positive relationship experiences compared with their insecure counterparts.

Beliefs, attitudes, and expectations – consisting of knowledge about the self and others in relationships that is abstracted from the history of an individual's relationship experiences, together with reflections on those experiences. This knowledge may apply to specific attachment figures, broader relationship types (e.g. friendship), or people in general. Compared with insecure individuals, secure individuals should have more positive beliefs, attitudes, and expectations about self and others.

Goals and needs (or wishes) – based on a history of achieving or failing to achieve felt security in attachment relationships individuals develop a set of attachment-related social and emotional needs. These differing needs are in turn expected to be associated with different goals to be pursued in social relationships. Individuals with different attachment styles therefore differ in the extent to which they are motivated to seek intimacy, avoid rejection, seek others' approval etc.

Plans and strategies – attachment-related goals and needs are expected to have associated plans and strategies designed to achieve or manage them. Plans and strategies are derived from past experience, stored in the form of 'if-then' rules, and automatically activated in response to situational cues. Individual differences in attachment styles are thus expected to be associated with different plans and behavioural strategies for dealing with given relationship scenarios. For example, avoidant individuals may have encoded a set of plans and behavioural strategies for maintaining distance that will be implemented should others attempt to get too close.

In sum, attachment working models can be viewed as knowledge structures representing the self and others in relationships. They develop as the result of experiences in diverse attachment relationships, and they are composed of interrelated memories, beliefs, goals, and plans (Collins & Allard, 2001).

2.2 Measurement Issues

More recent research on attachment theory in adult relationships cannot be understood without briefly considering the key changes in conceptualisation and measurement of attachment that have taken place since the publication of Hazan and Shaver's (1987) paper. A great deal of research has been conducted using Hazan and Shaver's (1987) original conceptualisation of adult attachment, involving three types/styles. The Attachment Style Questionnaire (Hazan & Shaver, 1987), drawing on the work of Ainsworth et al. (1978), requires respondents to select from three prototypical descriptions (i.e. secure, avoidant, and anxious-ambivalent attachment), the one attachment style that best fits their *general* experience in romantic relationships. This combination of forced-choice format and single item measurement for each attachment style has led to concerns about the reliability and validity of the measure. Particularly problematic is that the measure does not allow for individuals to vary in the extent to which they endorse a given style, and the styles are assumed to be mutually exclusive (Crowell, Fraley & Shaver, 1999).

To address these issues, several variations and extensions of Hazan and Shaver's measure were proposed (Feeney, 1999). For example, Collins and Read's (1990) Adult Attachment Scale was developed by converting Hazan and Shaver's prototype descriptions into their composite sentences to form Likert scale items. Factor analysis produced a three-factor solution. The dimensions were labelled 'Close' (comfort with closeness), 'Depend' (comfort depending on others), and Anxiety (about abandonment). In practice, the dimensions of 'Close' and 'Depend' are correlated such that they can both be considered facets of avoidance (Brennan, Clark & Shaver, 1998).

At the same time as these refinements were being developed, a four-category model of attachment was proposed (Bartholomew, 1990; Bartholomew & Horowitz, 1991). Bartholomew drew directly on Bowlby's assertion that attachment patterns reflect underlying working models of self (positive vs. negative) and other (positive vs. negative). She argued that if models of self and other jointly define attachment style, then four (not three) attachment styles are possible. The four styles are 'secure' (positive models of self and other); 'preoccupied' (c.f. anxious-ambivalent; negative model of self, positive model of other); 'fearful' (negative models of self and other, i.e. anxiety about abandonment combined with avoidant behaviour); and 'dismissing' (positive model of self and negative model of

other, i.e. apparent lack of anxiety about abandonment combined with avoidant behaviour). Thus, the distinctive feature of this conceptualisation is that two kinds of avoidance are proposed. The four types and/or the two underlying dimensions (Model of Self and Model of Other) can be assessed using a self-report prototype questionnaire (c.f. Hazan & Shaver, 1987), or by interview.

The questionnaire measure of the Bartholomew and Horowitz's (1991) four-category classification has become increasingly popular with researchers interested in adult attachment. However, Fraley and Waller (1998) and Brennan, Clark, and Shaver (1998) conducted exhaustive analyses of existing measures of attachment and found no evidence for a typological structure of attachment. Rather, two dimensions labelled *anxiety* and *avoidance* appear to best represent the attachment construct (Brennan, Clark & Shaver, 1998). These dimensions are consistent with the results of a seldom acknowledged part of Ainsworth et al.'s (1978) study in which discriminant analysis of the scales used to assess infant attachment styles also revealed two functions: Avoidance and Anxiety. Brennan et al. concluded that 'everyone is working with the same two dimensions that Ainsworth and her colleagues identified in 1978... The origins and implications of people's scores on those dimensions are what all attachment researchers deal with, whether knowingly or not' (Brennan, Clark & Shaver, 1998, p.69).

According to Brennan et al. high scores on the *anxiety* dimension indicate interpersonal anxiety or a fearful preoccupation regarding acceptance (and rejection) in the relationship. High scores on the *avoidance* dimension indicate avoidance or dismissal of closeness and dependency in relationships. Note that low values on both dimensions equate to a secure attachment style using the typological system. The dimensions of anxiety and avoidance also directly correspond to models of self and other respectively (c.f. Bartholomew and Horowitz, 1991). Thus, high anxiety can be seen as a reflection of a negative self-model, that is, feeling unworthy of others' care. High avoidance reflects a negative other-model in which others are seen as generally unreliable and untrustworthy. Despite these advances in knowledge about the attachment construct, and evidence that categorical measures have reduced power and reliability (Fraley & Waller, 1998), many researchers continue to utilise categories rather than dimensions. This is presumably because of their face-validity, ease of use, and theoretical parsimony (Crowell, Fraley & Shaver, 1999). However, based on the

evidence that dimensions more accurately capture the attachment construct, the present research adopts the dimensional approach.

2.3 Stability and Change in Working Models

A core debate in adult attachment research is whether attachment patterns are stable interpersonal orientations (i.e. dispositional), or subject to change. Consistent with the original conceptualisation of attachment theory (Bowlby, 1969, 1973, 1980), many researchers have assumed that attachment models developed early in life are relatively stable, resistant to change, and remain influential throughout adulthood (e.g. Hazan & Shaver, 1987; Shaver & Hazan, 1993). However, an alternative, 'revisionist' perspective assumes that early working models are not intrinsically stable because they are subject to continuous updating and modification in the light of new relational experiences. Thus, adults' working models may or may not correspond to their earlier infant working models, depending on how consistently the individual has experienced and evaluated certain types of relationships (Fraley, 2002; Lewis, 1994). There is empirical evidence to support both the stability and change positions (Hazan & Shaver, 1994). Therefore, in an attempt to resolve the debate, Fraley (2002) used mathematical modelling techniques to compare the predictions of each theoretical model with existing data on attachment stability, derived from a meta-analysis of longitudinal studies. The results suggested that childhood attachment working models remained moderately influential in adulthood, thereby supporting the stability hypothesis: 'despite the junctures afforded by life, there is an enduring tendency for people to remain relatively close to their original routes' (Fraley, 2002, p142).

According to Collins and Read (1994), a number of factors may promote stability. First, individuals may select social environments (e.g. a romantic partners) that confirm their beliefs and expectations about self and others. Second, working models may become self-fulfilling prophecies, such that people behave in a manner (e.g. defensive or clingy) that creates a confirmatory social environment. Third, information processing biases may lead people to perceive and interpret social situations in a manner that is consistent with their expectations. Despite the potential for stability, Collins and Read (1994) caution that the stability *or* change debate is too simplistic. Instead we should acknowledge that there are forces for both stability *and* change. In particular, they argue that powerful relationship experiences, that are long in

duration and/or emotionally significant, may serve to disconfirm beliefs and in turn modify working models of self and others.

The assumption of relative stability has led to treating attachment largely as an individual difference/trait variable (Pierce & Lydon, 2001). Hence, a substantial body of research has used attachment models to explain individual differences in a range of phenomena including: satisfaction and conflict in romantic relationships (Simpson, 1990; Simpson, Rholes, & Phillips, 1996), communication competence (Anders & Tucker, 2000), emotional control and anger propensity (Feeney, 1995; Mikulincer 1998a, 1998b), attention and memory defenses (Fraley, Garner, & Shaver, 2000), everyday social interaction (Horppu & Ikonen Varila, 2001; Pietromonaco & Barrett, 1997; Tidwell, Rice, & Shaver, 1996), stress coping (Ognibene & Collins, 1998), experiences of work (Hardy & Barkham, 1994; Hazan & Shaver, 1990) and balancing the work-family interface (Sumer & Knight, 2001). It is beyond the scope of this chapter to examine this research in detail. However, overall from these studies, a clear pattern emerges indicating that secure attachment (i.e. low avoidance and low anxiety) is associated with a raft of beneficial outcomes, while insecure attachment (i.e. high avoidance and/or high anxiety) is associated with more negative effects.

2.4 Global and Specific Working Models

Implicit in the assumption of attachment stability is the idea that individuals interpret and respond to the social world according to a single, 'global' working model. Increasingly, however, other researchers argue that adults must have multiple, differentiated working models for each of their relationships in order to account for people's differing experiences in their many roles and relationships (e.g. Baldwin, 1992; Collins & Read, 1994; Kobak, 1994; Lewis, 1994). As Collins and Read (1994) assert:

'...it is unreasonable to assume that a single, undifferentiated model can effectively guide the full range of attachment-related behaviour in adulthood. Multiple models of attachment provide the flexibility necessary for individuals to function adaptively and to satisfy attachment needs across diverse circumstances and relationships.' (p.42)

There is growing empirical evidence to support the idea of multiple, specific working models. It is well established that children have different attachment styles in their relationships with their mothers and fathers (e.g. Bretherton, 1985; Lamb, 1977). More recently, Cook (2000) found that within families of four, family members reported differing styles of attachment to each other across the different combinations of dyadic relationships.

Bartholomew and Horowitz (1991) compared young adults' working models for each of their parents and close friends and found considerable differentiation among them. Similarly, La Guardia, Ryan, Couchman, and Deci (2000) and Baldwin, Keelan, Fehr, Enns, and Koh-Rangarajoo (1996) asked people to assess their attachment style in the context of their most significant relationships and they too found that people reported different styles in different relationships. Together these studies suggest that attachment models are highly variable and relationship-specific, as opposed to trait-like, global relationship orientations.

The most recent thinking and research points to a hierarchical conceptualisation of attachment that links both global and specific working models in a dynamic relational network (Collins & Read, 1994). At the top of the hierarchy are the most general (i.e. global) models of self and others, representing the entire history of an individual's experiences in attachment relationships. Lower levels of the hierarchy contain models of self and others that represent particular classes of relationship (e.g. romantic partner, parent-child). The lowest level of the hierarchy contains models of self and other (in the singular) associated with specific relationship partners. As individuals encounter new and varied relationships throughout the lifespan, Collins and Read (1994) proposed that there is a dynamic interchange between general and specific models. Global, or 'default', models at the top of the hierarchy are predicted to influence, to an extent, the development of all relationship specific models since they represent existing expectations. Equally, relationship-specific models may lead to revision of more general models. Hence, there should be some overlap between global and specific working models, although it is not expected to be substantial (Shaver, Collins & Clark, 1996).

In support of this model, Pierce and Lydon (2001; Study 1) assessed global attachment by asking participants to think about their feelings in close relationships in general. For relationship-specific working models, individuals reported their feelings in each of four particular close relationships. Overall, a modest relationship was found between individuals' global and relationship-specific models of self (i.e. anxiety) and other (i.e. avoidance). Correlations of global and specific models of self ranged from .21 to .30. Correlations of global model of other and relationship-specific models of other ranged from .16 to .33. Participants completed that same set of measures again following a three-month interval, allowing for longitudinal analysis. Results showed that specific models generalised to global

ones in this period, and global models had a smaller but significant effect in shaping specific models.

Assuming that individuals hold both global and specific attachment models, which model will be activated and used in a given social interaction? Collins and Read (1994) stated that it depends on which model is most relevant to the situation. Thus, the general model is likely to be predominant in situations where little information is available (e.g. at the start of a new relationship). However, once a relationship-specific model has been developed it will be the preferred guide for interactions in that particular dyad. A study by Baldwin, Keelan, Fehr, Enns, and Koh-Rangarajoo (1996; Study 3) provides further insight on this issue. They demonstrated that it is possible to selectively prime one of an individual's multiple models (e.g. the most avoidant model they hold) by asking them to visualise that particular relationship. The type of working model made accessible had a significant impact on participants' preferences for potential dating partners. Thus, individuals primed with an avoidant working model tended to be least attracted to potential partners who were described as desiring an intimate relationship. This is consistent with the lack of trust and comfort with closeness that are characteristic of avoidance. Conversely, consistent with a working model containing beliefs about others' reluctance to be close, individuals primed with an anxious-ambivalent working model preferred partners who wanted a close relationship. Baldwin et al. concluded that the relative availability (i.e. presence in memory) and accessibility of working models determine people's thinking and responses in particular relationships. They suggest that the global model is chronically accessible and therefore most easily articulated and applied. However, once activated, specific models will be the primary guide for thoughts, feelings, and behaviour in an attachment-relevant context.

These ideas suggest a somewhat 'either/or' conceptualisation of the roles of global and specific attachment models. In practice, researchers have found that both global *and* specific working models predict functioning and outcomes in particular relationships. For example, Pierce and Lydon (2001) found that, in addition to the influence of specific working models, global models, especially anxiety, exerted a significant influence on quality and intimacy of interactions in specific relationships. Global anxiety is thought to remain an important influence in specific relationships because the global self-model may be more resistant to change, and hence a more permanent presence in the self-concept than global other-models (Collins & Read, 1994). In general, however, despite apparent joint effects of specific and

global models, empirical evidence indicates that relationship-specific models are the stronger predictors of relationship-relevant outcomes, including relationship satisfaction, positive expectations, and positive interactions in particular relationships (Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Cozzarelli, Hoekstra & Bylsma, 2000; Pierce & Lydon, 2001). Global models, on the other hand, are more strongly associated with general level variables such as psychological well-being (Cozzarelli, Hoekstra & Bylsma, 2000).

Taken together, the theory and evidence suggest that attachment working models can be conceptualised as both an individual difference/trait variable and a relationship variable (Pierce & Lydon, 2001). Consequently, a growing number of researchers advocate the joint consideration of global and specific models in attachment research (Kobak, 1994; Pierce & Lydon, 2001). More research is needed to a) examine the relative contribution of global and specific models in a range of relationship processes and outcomes, and b) the extent to which global and specific attachment models are distinct from each other. Nevertheless, this multi-level perspective is an important theoretical advance because it addresses the criticism that attachment theory has tended to adopt a very ‘internal’ view of the ways in which working models affect people’s thoughts, feelings and behaviours (Cook, 2000).

2.5 Attachment Working Models in Broader Social Relationships

Traditionally, working models were thought to develop only in relation to ‘key attachment figures’ – generally a romantic partner, or a parent/caregiver (Trinke & Bartholomew, 1997). The working models formed in such relationships are considered to represent ‘true’ attachment bonds. There is consensus among attachment theorists (e.g. Bowlby, 1969; Ainsworth, 1989; Hazan & Shaver, 1994) that a ‘true’ attachment bond comprises the following four elements:

- A strong, enduring, emotional tie with the other person, which may be positive or negative
- A wish to maintain proximity/contact with the person
- Feeling distress at involuntary separation from, or loss of, the person
- Seeking security and comfort in the relationship in times of distress

However, recent research has demonstrated that relationship-specific working models are also formed in a range of other social relationships. For example, Pierce and Lydon

(2001) found that individuals held separate working models for both *significant role* relationships - with a close friend, partner, or parent - and *salient* relationships, that is, people with whom individuals frequently interacted. Working models of salient relationships were assessed using Bartholomew and Horowitz' (1991) four paragraph attachment measure. In line with attachment theory predictions these specific models of self (anxiety) and other (avoidance) predicted quality and intimacy of daily social interactions in the corresponding non-intimate relationships.

In a similar vein, La Guardia, Ryan, Couchman, and Deci (2000) found that the concept of attachment working models was applicable to 'true' attachment figures (family, best friend, partner) as well as to more distal relationships with frequent contacts (e.g. roommate) and 'important' adult figures, such as a teacher or employer. Individual differences in level of attachment security in all three types of relationship predicted well-being. Baldwin, Keelan, Fehr, Enns, and Koh-Rangarajoo (1996) investigated working models in the context of individuals' 10 'most impactful' or 'significant' relationships. Specifically, they asked participants to report on relationships with any people who had a strong impact on their lives, be it positive or negative. The research showed that individuals held differentiated specific working models for all of these significant relationships. The different working models were related in predictable ways to theoretical outcomes (e.g. trust and relationship expectations) in the corresponding specific relationships.

Research has also demonstrated the applicability of the attachment working model construct to group membership. Smith, Murphy and Coats (1999) investigated the notion of group attachment in the context of undergraduate fraternities and sororities. Again, these groups were selected for study because of their presumed centrality and *importance* to students' lives. It was found that members of these social groups developed distinct working models of the self as a group member, and of the group as a source of identity and esteem. Group-specific working models were distinct from global working models of relationships and measures of group identification. In line with attachment theory predictions, the models predicted thoughts, emotions, and behaviours relevant to group membership.

Note that none of these studies was specifically designed to address *why* attachment working models are formed in salient and/or important, but non-intimate, relationships. Lopez (1997) hypothesised that the attachment system would be activated in student-

professor relationships because these relationships mirror aspects of parent-child dynamics, such as unequal status and an evaluative role. Similarly, Mallinckrodt, Gant, and Coble (1995) suggested that clients formed attachment working models in the context of the psychotherapy relationship because the therapeutic relationship shares features of parental relationships. For example the therapist offers a comforting presence (i.e. security), affect regulation, and a secure base from which clients can explore their inner and outer worlds. Taken together, this suggests that working models may develop in relationships that emulate the power dynamics of parent-child relationships, and/or fulfil certain attachment needs such as provision of a safe haven in times of need. Indeed, Ainsworth (1989) asserted that the defining feature of an attachment relationship is turning to the other person in times of distress. Other researchers believe that mere frequency and repetition of interaction is sufficient to establish working models that will guide thoughts, feelings, and behaviour in a given non-intimate social relationship, such as with an employer (Baldwin, 1992).

Overall, these studies suggest that it is valid to conceptualise certain non-intimate relationships in terms of attachment working models. It appears that individuals may build working models for relationships with all actors in their social networks with whom they have important role relations and/or frequent contact. The precise nature of the attachment bonds formed in these relationships is not yet well understood. It is clear that working models, or relational schemas, are not only tied to traditional 'attachment figures' (Baldwin, 1992). Yet it would be erroneous to assume that non-intimate relationships meet all of the requirements for classification as true attachment bonds. Trinke and Bartholomew (1997) reported that individuals in their study identified, on average, 10 different close relationships. However, even when considering close relationships, only around 5 were judged to be 'true' attachment bonds. It does appear that certain types of important, non-intimate relationship (e.g. teacher, therapist) may be conceptually similar in key respects to 'true' attachment relationships, but they are obviously not the same phenomenon when considered in the light of the characteristics of 'true' attachment. For example, while both types of relationship might serve as important havens of safety in particular social contexts, it is unlikely that individuals would feel the same devastation at the loss of these relationships as they would at the loss of a parent or long-term partner (c.f. Bowlby, 1969).

In sum, caution is required when interpreting the meaning of 'attachment' in the non-intimate relationship domain. Working models are apparently formed in some non-intimate

relationships, and preliminary research has demonstrated that they function according to the predictions of attachment theory. However, working models of non-intimate relationships should not be considered identical to those formed in 'true' attachment relationships. With this caveat in mind, the evidence indicates that degree of relationship *role significance* (i.e. importance) and relationship *salience* may be two important criteria for the development of working models in broader social relationships.

2.6 Attachment Working Models in Supervisory Relationships

Based on the preceding discussion it is argued that employee-supervisor relationships satisfy both the salience and role significance criteria associated with the development of working models in non-intimate relationships. In terms of salience, frequency of contact between an employee and supervisor might be expected to vary considerably depending on the nature of the job. However, supervisors function as an interface between those they manage and those to whom they are accountable (Yukl, 2002), and they are responsible for the work of the employees in their organisational unit (Mintzberg, 1975). In particular, according to Mintzberg (1973) a key role of managers or supervisors is the 'leader role'. This involves direct communication with subordinates in order to encourage, motivate, and harness individual efforts to meet the goals of the organisation. Thus, it can reasonably be expected that, at a minimum in most supervisory relationships, there would be social contact of sufficient frequency and regularity to enable the fulfilment of this formal interpersonal role obligation. Of course, the content and function of employee-supervisor communication can be informal as well as formal (Mintzberg, 1973; Gabarro, 1987), providing scope for further interpersonal contact. In fact, classic studies using diary and observational methods, found that managers spent between 26% (Stewart, 1967) and 48% (Mintzberg, 1973) of their time in face-to-face interaction with subordinates. Overall, it seems that specific working models of supervisory relationships could be expected to develop on the basis of relationship salience.

In terms of relationship role significance, the supervisory relationship is a key workplace relationship on two counts. Firstly, the employee-supervisor relationship can be considered an important role relationship in the sense that supervisors are the most influential figures in employees' work-based social networks (Beehr, King & King, 1990). Unlike social relationships outside of work, or relationships with colleagues, there is a clear and asymmetric distribution of power in supervisory relationships (Gabarro, 1987). Indeed Yukl (2002) notes

that influence over followers is the essence of leadership. Specifically, supervisors have power by virtue of their positions within the hierarchy of their organisations (Bass, 1960). Research and theory on Leader Member Exchange (Dansereau, Graen & Haga, 1975; Graen & Scandura, 1987; Graen & Uhl-ien, 1995) amply demonstrates that supervisors are in a position to selectively influence their employees' experiences of work through a variety of means including access to resources, allocation of work assignments, and the use of rewards and sanctions (see Schriesheim, Cogliser & Castro, 1999, for a review). In addition, supervisors generally also have expert power (French & Raven, 1959) by virtue of possessing greater knowledge than their employees concerning task-related and/or organisational processes and procedures. This power dynamic adds weight, or a sense of importance, to interactions between employees and their supervisors (Gabarro, 1987). In contrast, such a sense of significance is not generally experienced in working relationships with colleagues (Gabarro, 1987; Hinde, 1996; Neuberger, 1996).

The second aspect of role significance, evident in the supervisory relationship, stems from the parallel between another key supervisory role and one of the defining features of attachment relationships. As noted previously, according to theorists on childhood and adult romantic attachment (Bowlby, 1969; Ainsworth, 1989; Hazan & Shaver, 1994), a core characteristic of attachment relationships is use of the attachment figure as a safe haven to which individuals can retreat for comfort, support, and reassurance in times of distress. In the leadership literature, 'supporting' is asserted to be one of the key behaviours for effective leadership (Yukl, 2002). Supporting behaviour includes: providing sympathy and support when an employee is upset or worried; showing acceptance and concern; and being willing to help employees with both work and personal problems (Yukl, 2002). In effect, supervisors provide a potential haven of safety in the workplace for employees to turn to in times of need.

In sum, the supervisory relationship is both a salient and significant role relationship. Being both influential and a potential safe haven, in conjunction with regular interpersonal contact, should mean that supervisors are perceived as key figures in employees' work lives. Consistent with Lopez (1997) and Mallinckrodt et al. (1995), supervisory relationships can be seen as mirroring the safe haven function, and the asymmetry, of relations between parents and children. In parent-child relationships, the parent is the more dominant and powerful partner (Izard, Haynes, Chisholm & Baak, 1991), and the parent often serves as the child's solution and source of security, but not vice versa (Simpson & Rholes, 2000). Metaphorically

speaking therefore, supervisors arguably occupy the role of the 'older and wiser' figure in the eyes of the employees for whom they are responsible. Infants form attachments to precisely such figures because they can best provide a sense of security in an uncertain environment (Bowlby, 1969).

On the basis of this argument it is proposed that, in addition to holding global working models, employees form specific attachment working models in their relationships with their supervisors. Consistent with recent measurement approaches (e.g. Brennan, Clark & Shaver, 1998) it is hypothesised that there are two underlying dimensions of supervisor-specific attachment working models: anxiety and avoidance. High scores on anxiety (model of self) should be characterised by worry or concern about acceptance by the supervisor, and a sense of being unworthy or not valued as a member of the work unit. An expected consequence of these feelings is a desire to please the supervisor and gain their approval (c.f. Collins & Read, 1994). High avoidance scores (model of other) should be characterised by a lack of trust in the supervisor and a sense that they cannot be depended upon. Individuals with high scores on this dimension are expected to view a close working relationship with their supervisor as undesirable or unnecessary, and they should prefer to work autonomously, avoiding interaction and dependence in the relationship.

It is recognised that working models of employee-supervisor relationships do not represent 'true' attachment bonds. For most employees, it is unlikely that extreme distress would be experienced following separation from, or loss of, their supervisor. It is also acknowledged that most supervisory relationships are unlikely to be characterised by the type of strong, enduring affective bonds, and intimacy, that feature in 'true' adult and childhood attachment relationships. That is not to say that affective ties are absent in supervisory relationships. Indeed, 'new leadership' theories, such as transformational leadership (e.g. Bass, 1985) emphasise that effective leaders inspire loyalty, trust, and strong emotional attachment in followers (Den Hartog & Koopman, 2001). In addition, Kahn (1998) proposed that relationships at work are characterised by networks of strong and weak emotional attachments between employees and supervisors, supervisors and their superiors, and so on throughout the organisational hierarchy. Thus, the situation is perhaps best summed up by Gabarro (1987) who notes that affect is *less* important in relationships with managers compared with other social relationships, but not *unimportant*. In sum, while supervisory relationships cannot be classed as 'true' attachments, it is argued that the salience and role

significance of employee-supervisor relationships offer a strong basis for the proposition that attachment working models are formed.

3. Caregiving

3.1 The Role of Caregiving in the Development of Working Models

So far the discussion has focused on issues concerning the nature and scope of working models. A central question remains to be addressed, namely, how are working models formed? Earlier in the discussion it was noted that the formation of working models was based on repeated interactions with attachment figures. More specifically, Bowlby (1973) proposed that security of attachment (i.e. working models low on avoidance and anxiety) is determined in large part by the degree of 'responsiveness' afforded a child by their primary attachment figure. Bowlby defined caregiver responsiveness as the parent's willingness to act as a source of comfort and protection when needed. He stated that 'expectations of the accessibility and responsiveness of attachment figures that different individuals develop during their years of immaturity are tolerably accurate reflections of the experiences those individuals have actually had.' (Bowlby, 1973, p. 202). Thus, attachment theory proposes that working models are acquired as a result of the quality of day-to-day interactions that individuals have experienced in their relationships with their caregivers, with particular emphasis on responses during times of distress (Ainsworth, Blehar, Waters & Wall, 1978).

The pioneering research of Ainsworth, Bell, and Stayton (1974) and Ainsworth, Blehar, Waters, and Wall (1978) was the first to operationalise Bowlby's theory and demonstrate empirically the links between type of caregiving provided by primary caregivers, and the subsequent attachment working models developed by infants in their care. Ainsworth et al. (1978) conducted in-depth observations of primary caregiver behaviour (in this case, the mother's) at home during the first year of infants' lives. During multiple home visits to each mother-infant pair, trained observers assessed caregiving using a series of behaviourally anchored rating scales. Of particular importance were four scales designed to measure 'General Maternal Characteristics', comprising the following elements:

- *Sensitivity-insensitivity* – degree of awareness and accuracy of interpretation of infant signals and needs, and the appropriateness and promptness of responding to them

- *Acceptance-rejection* – degree to which positive and negative feelings are held and expressed toward the infant
- *Cooperation-interference* – degree to which caregiver respects the infant's autonomy, avoiding direct control or interference during problem-solving activities and interaction
- *Accessibility-ignoring* – degree to which caregiver is physically and psychologically accessible to the child

(N.B. Two further dimensions of General Maternal Characteristics - *lack of emotional expression*, and *maternal rigidity/compulsiveness* – were also used but since the main findings and later replications centre around the four scales described above (de Wolf & van Ijzendoorn, 1997), they are not discussed here. See Ainsworth et al. (1978) for further details).

Observations using the four key scales highlighted clear inter-group differences in maternal caregiving that were strongly associated with infants' attachment style, as assessed by the Strange Situation, at the end of the observation year. Ainsworth et al. (1978) concluded that 'the most important aspect of maternal behavior commonly associated with the security-anxiety [i.e. security-insecurity] dimension of infant attachment is manifested in different specific ways in different situations, but in each it emerges as sensitive responsiveness to infant signals and communications' (p.152). Since this original work, numerous studies have replicated the findings of Ainsworth and her colleagues (Weinfield, Sroufe, Egeland & Carlson, 1999). Kuncie and Shaver (1994) reviewed these studies, and the patterns of caregiving (also referred to as sensitive responsiveness, or sensitivity) most frequently associated with later secure (low avoidance, low anxiety), avoidant (high avoidance), and anxious-ambivalent (high anxiety) attachment working models are summarised below in Table 3.1.

As can be seen from the table, the primary caregivers of infants later classified as secure are alert and sensitive to their infants' needs and signals. They are able to accurately interpret infants' cues and respond to them in a manner that is prompt and appropriate (including no response if this is most appropriate to the circumstances, Ainsworth et al., 1978). They are readily accessible, being both physically present, and psychologically available (i.e. they give the child their full attention). These caregivers also display warmth in their interactions with their children, and they are cheerfully accepting of both positive and negative infant

behaviour. Their interactions are cooperative and designed to acknowledge and promote the infant's sense of autonomy.

Table 3.1: *Caregiving characteristics associated with secure, avoidant, and anxious-ambivalent attachment in infants*

| Secure | Avoidant | Anxious-ambivalent |
|--|---|---|
| Sensitive to infant signals and needs | Insensitive to infant signals and needs | Less sensitive, but not entirely insensitive to infant signals and needs |
| Warm and accepting of child | Rejecting of child; more sarcasm, anger or 'flat'/cold affect directed at child | Accepting of child, but not consistently so |
| Physically and psychologically accessible | Less accessible, physically and psychologically | Inconsistent physical and psychological accessibility |
| Responds contingently and appropriately to infant's signals/needs | Relatively unresponsive to infant's signals/needs | Inconsistent responsiveness to infant's signals/needs |
| Provides collaborative support (vs. control); promotes autonomy and exploration by child | Use of controlling tactics (vs. collaborative) during interaction | Interfering /intrusive during interaction; less collaboration, more coercion in problem-solving |
| Offers child frequent, warm physical contact | More unpleasant or less frequent physical contact with child | |

Table adapted from Kuncé and Shaver (1994)

The characteristics of primary caregivers of infants who are later classified as having avoidant working models can be conceptualised as occupying the opposite end of the continuum from characteristics of caregivers of secure infants (Kuncé & Shaver, 1994). As the table shows, caregivers of avoidant infants are much less sensitive to infants' needs and cues. They are relatively inaccessible both physically and psychologically, and they are often unresponsive to infants' signals (i.e. ignoring). They are not accepting of their infants, tending to reject or 'rebuff' (Ainsworth et al., 1978) their attempts to seek comfort and security. In addition, these mothers are more frequently angry, irritated, or simply cold and distant with their babies, even though they may strive to suppress it. Finally, the primary caregivers of infants who are later classified as avoidant tend to be unnecessarily directing or controlling in interactions with their infants.

According to Ainsworth et al. (1978) the caregivers of infants who would later be classified as having anxious-ambivalent working models were a far more diverse group. Nevertheless, as research summarised in Table 3.1 indicates, the defining characteristic for this group is a tendency to behave inconsistently. Thus, these caregivers are sometimes sensitive, but at other times impervious to their infants' signals and needs. They respond to infant distress less promptly and appropriately than the caregivers of secure infants, and they are not consistently accessible when infants need comfort or protection. Although these caregivers are also inconsistently warm and accepting, they are not actually hostile or rejecting. Finally, during interactions the caregivers of anxious-ambivalent infants tend to adopt an interfering or intrusive approach rather than being cooperative and facilitative. Overall, with these caregivers, responses may fail to come when needed or arrive when not wanted (Howe, 1995).

Working models are formed when infants internalise their experiences of these patterns of caregiving, confirmed through repeated interactions in many different contexts (Ainsworth et al., 1978; Bowlby, 1973). Thus, infants with secure working models have learned that they can rely on their caregiver to be available and sensitively responsive when they need comfort and reassurance. This promotes a model of the other as dependable and trustworthy. Being confident that the attachment figure will respond positively in times of need in turn engenders a strong sense of the self as worthy of love. If infants have experienced a history of rebuffs or indifference after approaching their caregiver when they were upset, they lose confidence in the availability of their caregiver and learn to expect rejection. They cope with rejection by turning inwards and looking after themselves. Consequently, an avoidant working model is formed in which others are represented as unavailable and untrustworthy, while the self is viewed as either unworthy of, or not needing love (i.e. autonomous). Finally, if caregivers are repeatedly inconsistent when needed – warm, available, and responsive sometimes, but not others – a great deal of uncertainty is generated. An anxious-ambivalent working model is then developed in which others are seen as confusing and unpredictable. The self is seen as ineffective at obtaining others' love and interest, leading infants to doubt that they are worthy of love or capable of controlling what happens to them (Ainsworth et al., 1978; Bowlby, 1973).

Some researchers are sceptical about the central role of parental caregiving, or sensitivity, in the development of attachment working models (de Wolff & van IJzendoorn,

1997). In particular, they point to the fact that subsequent replications of Ainsworth's study, and meta-analyses of replication studies, have generally found a significant but considerably smaller relationship between caregiving and later attachment security, in comparison with Ainsworth et al.'s (1978) original, strong findings (de Wolff & van IJzendoorn, 1997). However, part of the problem may simply stem from the fact that different studies have used different measures of caregiving, and have varied the number of hours of home observation (Weinfield et al., 1999).

A further criticism of research on the antecedents of infant attachment is that despite being longitudinal, the majority of research is nevertheless correlational, making it difficult to be confident about causation (van IJzendoorn, Juffer & Duyvestyn, 1995). To address this issue, van IJzendoorn et al. (1995) conducted a meta-analysis of 12 intervention studies aimed at enhancing parental caregiving skills and, in turn, children's attachment security. They found that therapeutic interventions were effective in: a) improving parental sensitivity to infant's needs and communications, and b) enhancing, to an extent, the quality of infant-mother attachment. The authors concluded that 'the association between maternal sensitivity and infant attachment security is indeed a causal relation. Overall, enhancing maternal sensitivity implied a (small) improvement in infant attachment security' (van IJzendoorn, Juffer & Duyvestyn, 1995, p.244). As a whole, the evidence suggests that caregiving is certainly an important factor in determining attachment working models in childhood. However, there may well be other contextual and interpersonal factors that also play a key role, for example, caregiver personality and degree of social support available to the caregiver (Belsky, 1999; de Wolff & van IJzendoorn, 1997).

3.2 Caregiving in Adult Relationships

Bowlby (1973) theorised that, in adulthood, the quality of caregiving provided by an individual's 'principal attachment figure' (e.g. romantic partner) continues to influence the individual's attachment working model. Despite this, the role of caregiving in adult relationships has so far received relatively little attention (Bell & Richard, 2000; Kuncé & Shaver, 1994). Of the few studies conducted, the predominant focus has been on global working models as antecedents of caregiving. That is, researchers have been more interested in how attachment determines caregiving quality as opposed to how caregiving determines quality of attachment. Kuncé and Shaver (1994) were the first to adopt this approach. They

developed a self-report measure of caregiving quality in romantic dyads, based on a review of the parent-child caregiving literature. Factor analysis revealed four scales: proximity (i.e. provision of physical forms of comfort); sensitivity (vs. insensitivity); cooperation (vs. control); and compulsive (i.e. over-involved) caregiving. Using Bartholomew and Horowitz's (1991) four-category measure of attachment, Kuncé and Shaver (1994) found that secure individuals (low anxiety and low avoidance) reported relatively high levels of sensitivity and proximity combined with relatively low levels of controlling and compulsive caregiving; dismissing individuals (low anxiety and high avoidance) reported low proximity, sensitivity, and compulsive caregiving; and both fearful (high anxiety and high avoidance), and preoccupied (high anxiety and low avoidance) individuals reported high compulsive caregiving coupled with low sensitivity.

More recent self-report studies (Carnelley, Pietromonaco & Jaffe, 1996; Feeney, 1996; Feeney & Collins, 2001), as well as observational studies (Collins & Feeney, 2000; Simpson, Rholes & Nelligan, 1992) have supported the findings of Kuncé and Shaver (1994), leading to the conclusion that each attachment style / working model is systematically associated with a unique pattern of caregiving behaviour. In general, secure working models (indicated by low anxiety and avoidance) are associated with more effective, responsive caregiving. Conversely, insecure working models are associated with ineffective caregiving behaviour.

There are signs that researchers are beginning to turn their attention toward the role of caregiving in determining working models in adult relationships. Kobak (1994) pointed out that it is usually assumed that working models determine relationship quality, but given that the research in this area has been almost exclusively cross-sectional the direction of causality might in fact be reversed. The latter interpretation would be more consistent with Bowlby's (1973) proposition regarding the influence of caregiving in adult relationships. In a similar vein, Simpson and Rholes (1994) speculated that the provision of support in couples during times of stress may serve to strengthen or change working models of the other.

Note that these ideas, and Bowlby's original formulation, are rooted in the assumption of a single, global working model, which might be adjusted depending on a person's experiences with their current principal attachment figure. In contrast, La Guardia, Ryan, Couchman, and Deci (2000) point to the recent evidence concerning the multiple, relationship-specific nature of working models (discussed earlier), and propose that 'one

might extend this classic formulation to suggest that the quality or responsiveness of particular relationship partners, even those encountered initially much later in life, could actually affect the degree to which people are securely attached within those particular relationships, thus allowing for within-person variation' (p. 368).

In order to test this proposition, La Guardia et al. (2000) operationalised caregiving as 'the degree to which various partners satisfy innate psychological needs for autonomy, competence, and relatedness' (p. 380). Participants were asked to report their working models for each of six relationships (including 'true' attachment figures and broader social relationships) and rate how well each relational partner satisfied their psychological needs. Multi-level analysis indicated that overall attachment security, model of self (i.e. anxiety), and model of other (i.e. avoidance) in each relationship were positively predicted by the degree to which respective relationship partners fulfilled individuals' needs. The strongest predictor of working models was fulfilment of the relatedness need, that is, the degree to which a particular relationship partner made the individual feel connected with and cared for by them. Thus, this study provides preliminary evidence that quality of caregiving received in each of an individual's close, significant, and salient relationships may play a key role in determining the respective specific working models held for each self-plus-other dyad.

3.3 Supervisor Caregiving

As already noted, it is the supervisor's role to provide a psychological safe haven for their employees. In other words, supervisors can be viewed as the primary organisational caregiver for employees in their charge. Consistent with this notion, research on social support at work has shown that support is most effective in buffering against the effects of stress when provided by the supervisor (Beehr, King & King, 1990; Cohen & Wills, 1985; Fenalson & Beehr, 1994). It is proposed that, just as parents have been observed to differ in the nature and quality of caregiving that they provide their children, so supervisors might differ in the quality and consistency of caregiving afforded their employees, particularly when they seek reassurance and support. In turn, differences in supervisor caregiving are expected to be associated with differences in employees' supervisor-specific working models, as measured by the dimensions of anxiety and avoidance.

To the best of the author's knowledge, such an attachment theory perspective of caregiving in supervisory relationships has received very little previous attention by organisational researchers. The notable exception is the work of Kahn (1993; 1998). He theorised that just as children require secure bases or safe havens, adults at work need 'anchoring relationships' in which to receive effective caregiving at times when they feel emotionally unsettled or insecure. In an in-depth case study of a social work agency, using observation and interviews, Kahn investigated the nature of caregiving that occurs in working relationships, and the formal and informal networks of caregiving that develop across organisations. Through qualitative analysis, he identified eight behavioural dimensions of caregiving, namely: accessibility; inquiry (i.e. probing for feelings); attention (i.e. active listening); validation (i.e. communicating positive regard); empathy; support; compassion (including interpersonal warmth); and consistency. Summarising these dimensions, Khan concluded that effective workplace caregivers 'neither intrude nor abandon, that is, are neither too unresponsive (when others seek proximity or help) nor overactive and impinging (when others need to explore and operate on their own); instead they remain emotionally present, ready to come to aid should the need arise' (Kahn, 1998, p. 43). While Kahn did not relate caregiving to attachment working models in detail, he observed that quality of caregiving, especially that provided by supervisors, led individuals to feel either emotionally attached or *detached* in their relationships. The research also found that an absence of caregiving relationships at work was associated with physical and psychological withdrawal, and burnout. Overall, this research supports the relevance of attachment theory and the caregiving construct to employees' experiences of work and well-being.

A central aim of the present research is to extrapolate from Ainsworth et al. (1974; 1978) and Kahn's work (1993; 1998) to develop a scale measure of employee perceptions of supervisor caregiving. This scale is necessary to enable the proposed research on the roles of supervisor caregiving and attachment working models in employee experiences of negative emotions. The measures of adult caregiving developed in the context of romantic relationships (e.g. Carnelly, Pietromonaco & Jaffe, 1996; Kuncze & Shaver, 1994) are self-report scales measuring a partner's *self-perceptions* of the caregiving they contribute to their relationship. In the present research, the focus is intended to be employees' perceptions of their supervisors' caregiving behaviour towards them. Existing measures of caregiving in close relationships do not therefore lend themselves to easy adaptation. Moreover, the dimensions on existing scales appear to vary considerably between measures, and do not

always correspond closely to the components of caregiving as originally described by Ainsworth et al. (1978).

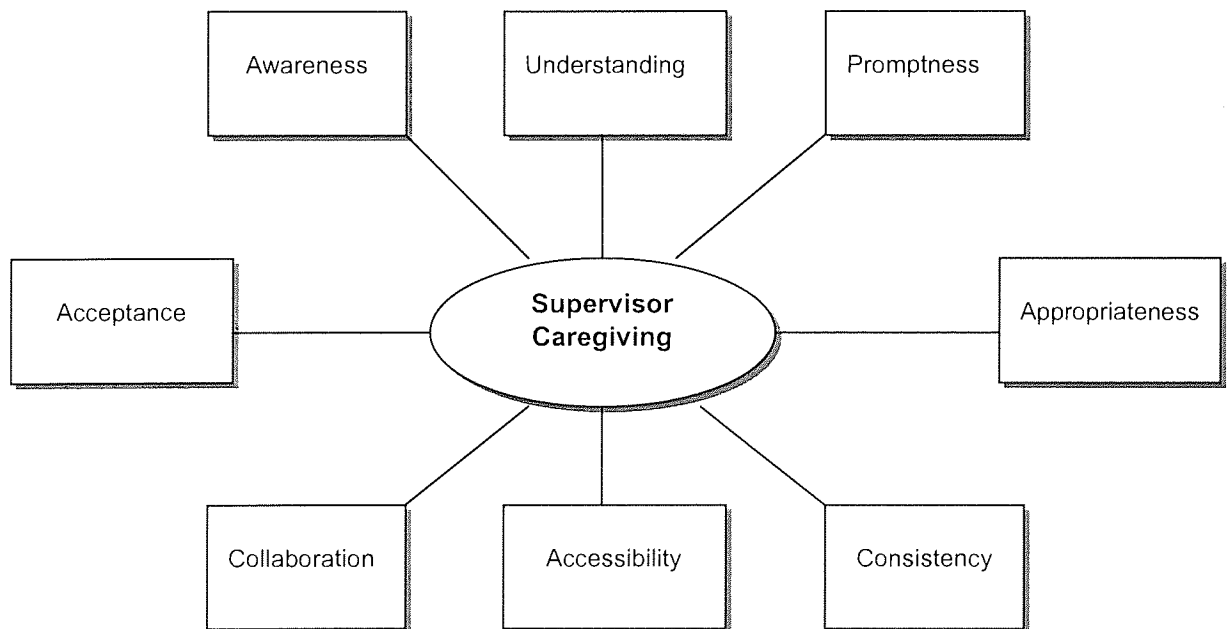
Another option might be to adapt an existing, categorical measure of parental caregiving (Hazan & Shaver, unpub). However, this option is rejected on the grounds that a categorical measure would suggest that supervisor caregiving varies only in kind rather than by degree. This is a misleading conceptualisation, and could lead to a loss of valuable information. Furthermore, if attachment working models are best operationalised and measured in terms of dimensions (i.e. using a scale measure) (Brennan et al. 1998), it is reasonable to assume that the caregiving that promotes the development of working models is also best conceptualised in dimensional terms. Finally, it is important to develop new scale items that, while founded on the original infant-caregiver concepts, are appropriately translated in to the context of adult, employee-supervisor relationships as they are manifested in the workplace. An objective of the research is therefore to develop a scale that draws as closely as possible upon Ainsworth and her colleagues' original conceptualisation, and integrates Kahn's subsequent work-related operationalisation of caregiving.

In the present context, therefore, supervisor caregiving refers to *the degree to which the supervisor understands, and is attuned to, employees' feelings, needs and concerns and, given this insight, responds promptly and appropriately to employees' distress signals. The supervisor high in caregiving skills is accepting of employees and always accessible, both physically and psychologically. Such a supervisor can also be depended upon to respond to employees' requests for support in a consistently positive manner that is rarely inappropriately intrusive, nor controlling.* (N.B. it is acknowledged that the proposed measure of supervisor caregiving reflects employees' subjective experience and perceptions of their supervisor's behaviour, as opposed to objectively measured supervisor behaviour. However, in order to enhance readability of the thesis, perceptions will generally be treated as implicit in the term 'supervisor caregiving', rather than explicitly mentioned every time the construct is referred to.)

As a first step in developing the supervisor caregiving scale, the definition is operationalised here as eight behavioural components. Figure 3.1 illustrates these components. The components are shown separately but it is likely that each aspect is highly intercorrelated, with some aspects being necessary conditions for others to occur (c.f.

Ainsworth et al., 1978). Seven of the components shown below (awareness, understanding, promptness, appropriateness, acceptance, collaboration, and accessibility) were derived by directly translating Ainsworth et al.'s (1978) categories of maternal behaviour (sensitivity-insensitivity, acceptance-rejection, co-operation-interference, and accessibility-ignoring) into corresponding categories of supervisory behaviours. Note, however, that Ainsworth et al.'s operationalisation of sensitivity-insensitivity appeared to contain several distinct aspects of behaviour (e.g. understanding, promptness of response), while the remaining three categories were smaller, and more homogeneous (see p. 60). It was therefore decided, for the sake of greater conceptual clarity and ease of operationalisation, to split sensitivity-insensitivity into the four separate components (awareness, understanding, promptness, and appropriateness) that were suggested by Ainsworth et al.'s behavioural descriptions. An eighth component – consistency – was added because the attachment literature clearly attributes importance to the overall consistency of caregiver behaviour. In addition, Kahn's (1993; 1998) operationalisation of caregiving relationships in organisations cites consistency as a key dimension of effective caregiving.

Figure 3.1: *Behavioural Components of Supervisor Caregiving*



Hence, based on attachment theory and research, it is proposed that effective supervisor caregiving comprises the following features:

Awareness - caring supervisors will be aware of how their employees are feeling and of significant work-related and/or personal concerns they may have. Supervisors actively attain and maintain awareness of their employees' well-being through social interaction, for example, enquiring after employees' well-being, and noticing when a particular individual is under strain.

Understanding - having become aware that an employee is experiencing some kind of difficulty, the supervisor must be able to accurately interpret the signals and understand the situation from the perspective of the employee. This requires a degree of empathy, or perspective-taking ability (c.f. Ainsworth et al, 1974).

Acceptance – caring supervisors accept their employees as they are. Acceptance is, in part, conveyed by a supervisor's warm interpersonal style when interacting with an employee.

Accessibility – despite other demands on their time, caring supervisors are easily accessible and available, both physically and psychologically, when employees need to see them with a problem.

Promptness – when employees communicate that they are in need of help or advice, caring supervisors will act promptly to acknowledge and/or deal with the concerns raised. The supervisors' reactions are (as far as possible) contingent with the distress signal, rather than delayed, or belated.

Appropriateness – in dealing with employees' concerns, caring supervisors take the most appropriate course of action. Sometimes taking no action at all may be the most appropriate response – when employees simply need the opportunity to talk things through, for example.

Collaboration – caring supervisors take the employees' wishes into account when the employees seek solutions to their concerns. That is, supervisors respect employees' independence and ownership of the problem, and do not try to intrude, or take control.

Consistency - caring supervisors can be relied upon to respond to their employees in a consistently constructive and sensitive manner.

The concept of supervisor caregiving is fully consistent with existing constructs in the emotions, leadership, and social support/workplace stress literatures. For example, supervisor caregiving concerns supervisors' willingness and ability to provide a safe haven, particularly when employees turn to them in times of need. Similarly, social support is commonly defined as 'social transactions that are perceived by the recipient or intended by the provider to facilitate coping in everyday life, and especially in response to stressful situations' (Pierce,

Sarason & Sarason, 1990, p.173). In the occupational stress literature, social support is most often considered in terms of supervisory and/or co-worker support (Kickul & Prosig, 2001). Following the lead of Caplan, Cobb, French, Harrison, and Pinneau (1975) supervisory support is usually operationalised as two dimensions (Fenlason & Beehr, 1994):

- emotional support – listening, expressions of caring, and showing concern for employee welfare
- instrumental support - provision of tangible assistance

Clearly then, there are similarities between the supervisor caregiving and supervisory support constructs, particularly emotional support. However, it is likely that supervisor caregiving is a related but broader construct than supervisory support. For example, the notions of contingent, consistent, and collaborative responsiveness do not appear to be captured by supervisory support. In addition, critics note that the dimensions of supervisory support are often poorly operationalised and inadequately measured (Fenlason & Beehr, 1994). Supervisor caregiving, on the other hand, offers a theoretically derived and comprehensively operationalised construct with which to investigate the nature and consequences of supportive supervisory behaviour.

Another conceptually related construct is emotional intelligence. Specifically, a key element of supervisor caregiving, as defined for the purposes of the present research, is the ability to detect, understand, and respond appropriately to employees' distress signals. This aspect of supervisor caregiving is consistent with emotional intelligence (e.g. Mayer & Salovey, 1997, see chapter 2), which emphasises the ability to perceive, understand and regulate others' emotions, as well as one's own. There are however, key differences between the constructs. For example, supervisor caregiving is not directly concerned with supervisors' own emotion knowledge and emotion regulation abilities. By the same token, emotional intelligence does not specifically include factors such as showing acceptance, promptness, and consistency in dealing with others. Nevertheless, (while not a focus of the present research) supervisors rated highly on a measure of supervisor caregiving would also be expected to score highly on indices of emotional intelligence.

In the leadership literature, there are a number of leadership theories that contain dimensions with some resemblance to supervisor caregiving. For example 'consideration' (e.g. Fleishman & Harris, 1962) concerns the degree to which leaders show concern for their employees; are approachable; treat all employees as equals; express appreciation of

employees' efforts; and consult employees on important matters. Considerate leaders emphasise relationships, trust, and interpersonal warmth (Bass, 1990). A dimension of Path Goal Theory (e.g. House, 1971; House & Mitchell, 1974) is 'supportive leader behaviour', which involves establishing good relationships with employees and satisfying their needs. One of the four dimensions of transformational leadership proposed by Bass (1985) is 'individualised consideration'. This includes coaching, mentoring, and supporting employees in order to help them achieve their potential in a way that matches individual and organisational needs. Finally, a central aspect of Leader Member Exchange - a construct often referred to as 'overall relationship quality' (e.g. Graen & Uhl-bien, 1995) - is degree of (mutual) support in the supervisory relationship.

It is apparent that supervisor caregiving and the aforementioned leadership constructs have a shared emphasis on the importance of warmth and support in the supervisory relationship. It is anticipated that supervisor caregiving would be correlated with measures of supportive leadership based on these constructs (research indicates that the various leadership constructs are highly inter-related, Bass, 1990; Gerstner & Day, 1997). However, a key distinction between the approaches is that supervisor caregiving concerns a much more relationship-focused operationalisation of this aspect of supervisor behaviour. Notably, supervisor caregiving is not concerned with employee performance, motivation, decision-making processes, etc. The leadership constructs, on the other hand, are at heart concerned with how leaders can best motivate and influence their followers in order to improve performance and achieve organisational goals. Thus, compared with supervisor caregiving, the leadership constructs and the theories to which they belong encapsulate a much broader, and essentially rational, conceptualisation of the supervisor-subordinate relationship (Kahn, 1998).

In sum, at the conceptual level, supervisor caregiving appears consistent with existing constructs of social support, leadership, and emotional intelligence. However, it is also clear that the constructs are theoretically distinct, with differing starting points, emphases, and operationalisations.

4. Summary

Attachment theory was first proposed to explain infant-caregiver relationships, but subsequently its principles have been widely applied to a broad range of significant and/or salient adult relationships. Differences in the quality of attachment relationships are associated with differences in working models of self (i.e. anxiety) and others (i.e. avoidance). Working models serve as guides to predicting, interpreting, and responding to one's own and others' actions in relationships. Individuals are thought to hold relatively stable, global models reflecting the history of their attachment relationships, as well as more specific working models tied to particular relationships. Overall, the evidence suggests that global working models and relationship-specific models jointly determine outcomes in a particular relationship, but specific models are the superior predictors.

Extrapolating from infant-caregiver research and theory, the security of specific working models may be determined by the availability and responsiveness of the attachment figure. Secure models (low anxiety and low avoidance) of attachment are associated with experiences of available, sensitive, and responsive caregiving. Insecure models (high anxiety and/or high avoidance) develop as a result of inconsistent or rejecting caregiving. In the light of the theory and evidence reviewed it is proposed that the employee-supervisor relationship can be conceptualised as an attachment relationship. Based on the quality of caregiving received from the supervisor, employees are expected to form specific working models of their supervisory relationships. Supervisor-specific working models should guide how individuals interpret and react to events in the context of the supervisory relationship. It is to this issue that the discussion now turns.

Chapter 4: Attachment and Emotion

In Chapter 3 it was suggested that working models may serve as guides to interpreting and responding to supervisory relationship events. This chapter examines these issues in more detail. The chapter begins with a brief overview of the relevant theory before presenting the main ('Independent Effects') model for the present research. Subsequent sections then elaborate on the relationships proposed by the model, with particular reference to the role of specific working models in determining cognitive and emotional responses in supervisory relationships. Following this, an alternative ('Interaction') research model is presented and discussed. The chapter ends with a summary of the literature review, and the benefits of adopting the proposed attachment theory perspective of employee negative emotions in supervisory relationships.

1. Attachment Theory and Emotion

The review of the workplace emotions literature in Chapter 2 highlighted that emotions can be viewed as responses to a combination of situational determinants (i.e. events) and the meaning, or interpretation, an individual ascribes to those events. It was also noted that existing theory and research on emotions at work tends to ignore the influence of the relational context in which many emotion-eliciting events occur. Attachment theory on the other hand, and the concept of working models in particular, enables the development of an integrated framework for understanding the mechanisms underlying differing interpretations of events, and emotional reactions to them, in the context of interpersonal relationships. According to Bowlby (1980) working models of attachment are pivotal in determining how relationship events will be perceived, interpreted, and responded to emotionally:

Every situation we meet with in life is constructed in terms of the representational models we have of the world about us and of ourselves. Information reaching us through our sense organs is selected and interpreted in terms of those models...On how we interpret and evaluate each situation, moreover, turns also how we feel (Bowlby, 1980, p229)

Effectively, by proposing a link between events, interpretations, and feelings, Bowlby's theorising pre-empted contemporary cognitive appraisal theories of emotion (Shaver, Collins & Clark, 1996). More recently, attachment theorists (e.g. Collins, 1996; Collins & Read,

1994; Shaver, Collins & Clark, 1996) have explicitly drawn upon existing research in social and cognitive psychology, particularly cognitive appraisal theories of emotion, to elaborate on Bowlby's original propositions. Thus, Collins and Read (1994) suggest that, as highly accessible cognitive / knowledge structures stored in long-term memory, working models will be automatically activated upon the occurrence of an attachment-relevant event. Any relationship event has the potential to be relevant to attachment concerns (Collins, 1996). However, heightened activation of working models is more likely in situations involving the warmth, availability, and responsiveness of relationship partners in times of need (Collins, 1996). Once activated, working models are proposed to have a direct impact on social information processing, including event perception and interpretation. That is, working models at both the global and relationship-specific levels influence (to varying degrees) the types/features of events that are likely to be noticed and remembered, and the characteristic ways in which those events are socially construed or interpreted (Collins & Read, 1994; Shaver, Collins & Clark, 1996). In line with cognitive appraisal theories, the results of these cognitive processes in turn influence the nature of emotional reactions to events. Since individuals with different working models are expected to perceive and interpret events in different ways, they should react to distressing relationship events with differing negative emotions (Collins, 1996; Collins & Read, 1994; Shaver Collins & Clark, 1996). In short, there is an indirect (mediated) link between working models and emotions (Collins & Read, 1994). Additionally however, theorists propose that working models exert a direct influence on emotions via the operation of automatic/unconscious affect regulation strategies that are specific to individuals with different working models (Collins, 1996; Collins & Read, 1994; Shaver Collins & Clark, 1996). Finally, Collins and Read (1994) emphasise that, overall, working model activation and the associated cognitive and affective processes need not be actively directed. Rather, it is thought that the whole attachment-emotion system may operate spontaneously, and largely outside of conscious awareness.

2. Research Model

All of the theory and concepts that are relevant to understanding negative emotions in supervisory relationships, from an attachment theory perspective, have now been introduced. Therefore, this is a suitable juncture at which to present the research model that forms the theoretical framework for the present research. The model is first described in outline. This is followed by a more detailed consideration of the proposed relationships as they pertain to

the dependent variables for the research, namely, cognitive processes and negative emotional responses (the relationships among the predictors were discussed in the previous chapter). Note that the model is intended only as a general framework that will serve as a guide to the current, preliminary research, but which also may be used and developed further in future research.

Figure 4.1: *Independent Effects Model*

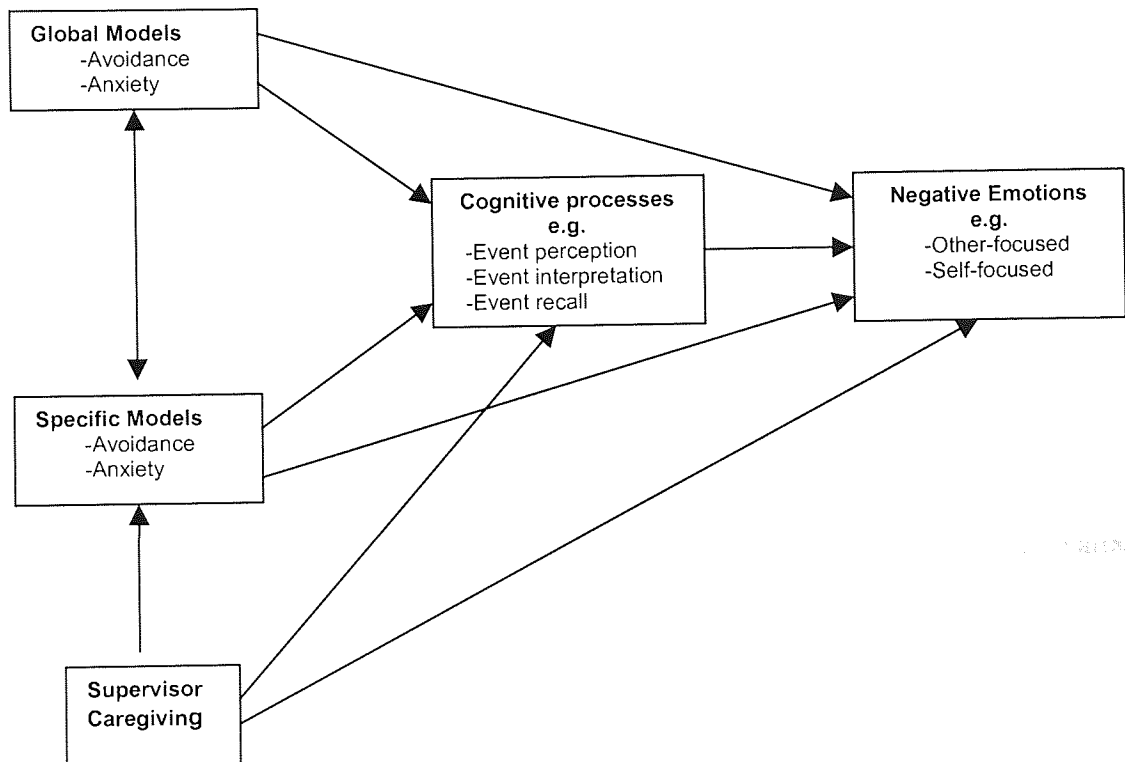


Figure 4.1 above shows the proposed associations between supervisor caregiving, specific and global working models, cognitive processes, and negative emotions. Based on the infant-caregiver literature, it is proposed that employees' perceptions of the quality of caregiving they receive from their supervisors shape the development of specific working models of the supervisory relationship. It is argued that differences in specific working models (i.e. degree of anxiety and avoidance) differentially influence the cognitive processing of interpersonal events that occur in the supervisory relationship. In turn, differences in cognitive processing are expected to lead to differences in negative emotional reactions. In addition to this mediated effect, it is proposed that specific working models directly influence emotional reactions via the operation of automatic affect regulation strategies (to be discussed later). The model also shows that global models are expected to jointly influence cognition

and emotion, hence the model is referred to as the Independent Effects Model. In general, from the research reviewed in the previous chapter it is expected that the influence of specific models will be greater than that of global models. The double-headed arrow between specific and global working models indicates that a small relationship is expected between the two constructs because some of the contents of each model may generalise to the other over time (e.g. Pierce & Lydon, 2001). The model indicates that perceived supervisor caregiving is expected to indirectly influence negative emotional reactions, mediated by the activation of specific working models and, in turn, cognitive processes.

Supervisor caregiving is also expected to have a direct effect on cognitive and emotional responses since it is through these processes that working models are established and maintained (Collins & Read, 1994). These links are also consistent with existing theory and research in the domain of emotions at work. Specifically, as discussed earlier, Affective Events Theory (Weiss & Cropanzano, 1996) suggests that certain environmental features, including supervision, may predispose the occurrence of events that employees will interpret and respond to emotionally. Thus, for example, if supervisors are consistently rejecting, or inconsistently available, the likelihood of them initiating negative emotion-eliciting events should be increased. In contrast, supervisors who are perceived as generally, warm, available and responsive should be less likely to behave in a manner that leads to negative emotions.

Having provided a brief overview of the theoretical framework, the sections below focus in more detail on the relationships between working models of attachment, cognitive processes and emotional responses. For each element, the relevant theory and empirical evidence is reviewed, and implications for the present research are outlined. Note that existing research generally pertains to global working models. However, research discussed in the previous chapter suggested that, relative to global models, specific working models exert the same, but generally stronger, effects in the relationships to which specific models are tied. In the light of this, the discussion of implications for the present research makes particular reference to the role of supervisor-specific working models in determining cognitive and emotional responses. However, it is assumed that the theory and research apply to both global and specific working models.

It is also important to keep in mind that the vast majority of existing research has investigated attachment using a three or four category measure of working models.

Consistent with Brennan et al.'s (1998) two-dimensional model of attachment, the implications for the present research are developed from the literature on the assumption that the categories 'anxious-ambivalent' (Hazan & Shaver, 1987) and 'preoccupied' (Bartholomew & Horowitz, 1991) broadly translate as high scores on anxiety and negative models of self. Equally, it is assumed that the categories 'avoidant' (Hazan & Shaver, 1987) and 'dismissing' (Bartholomew & Horowitz, 1991) translate as high scores on the avoidance dimension and negative models of others. Finally, within this scheme, research regarding 'secure' attachment (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987) can be understood as low scores on both anxiety and avoidance, while 'fearful' attachment (Bartholomew & Horowitz, 1991) equates to high scores on both dimensions.

2.1 Cognitive Processes

Collins and Read (1994) proposed that the memories, goals, beliefs, and expectations inherent in working models of attachment should strongly shape how people think about relationships and the events that occur within them. They suggest three cognitive processes that should be influenced by working models: memory, event perception, and event interpretation.

2.1.1 Memory

At the most basic level, working models are expected to shape individuals' memory for social information. Drawing on existing social cognition literature, Collins and Read (1994) proposed that working models serve as relationship schema that bias memory toward schema-relevant and schema-consistent information. Specifically, individuals' relationship experiences should be stored, recalled, and reconstructed in a manner that is consistent with their models of self and others. Thus, the working models of insecure individuals (high avoidance and/or anxiety), who have a history of negative relationship experiences, should facilitate the storage and recall of negative aspects of interactions. An opposite pattern is expected for secure individuals (low avoidance and anxiety) given their more positive past relationship experiences.

A study by Mikulincer (1998c) provides some support for this idea. Participants in a laboratory study were asked to recall positive and negative trust episodes that they had

experienced in relationships with parents and romantic partners. The time taken to retrieve the memories was then recorded and compared across attachment styles. Results showed that secure individuals recalled positive trust episodes (events that validated their trust in partners) more easily than insecure individuals. Both avoidant and anxious-ambivalent individuals had significantly faster recall for negative trust episodes (events that violated trust in partners) compared with secure participants. In another study, Mikulincer and Horesh (1999) investigated the impact of *self*-models on individuals' memory for other people. Participants were presented with descriptions of people that varied in the extent to which they were similar to, or different from, the participants' actual and unwanted self. They were later asked to recall as many traits as possible for each described person. Avoidant individuals more easily recollected the person that was closest to their unwanted self, and anxious-ambivalent individuals recalled the target that resembled their actual self. Secure individuals did not show any evidence of memory bias. Mikulincer and Horesh (1999) concluded that insecure individuals' memory for new people was biased by the projection of different aspects of their self-models on to the social information they received. Together, these studies indicate that working models play a key role in shaping memory for relationship-relevant information. Thus, in the present research, it is expected that, compared with secure employees (low anxiety and avoidance), individuals with high scores on specific anxiety and/or avoidance should be able to recollect a greater number of negative events having occurred in their supervisory relationships.

2.1.2 Event Perception

The goals associated with working models serve to direct attention and influence what will be perceived as a 'notable event' in relationship interactions (Shaver, Collins & Clark, 1996). As noted in the previous chapter, individuals with different attachment working models are thought to differ in the goals they pursue in social interactions (Collins & Read, 1994). Goals are rooted in differing attachment experiences and concerns. Insecure individuals have experienced significant others as unresponsive, leading them to conclude that relationships are difficult and painful (Shaver & Hazan, 1993). They expect, and therefore fear, rejection and adapt by developing interaction goals that will protect them from distress (Kobak & Sceery, 1988). Collins and Read (1994) propose that these differing goals predispose individuals to attend to, and hence perceive, certain features of the environment over and above other features. For example, in order to minimise potential distress, the goals

of anxious-ambivalent individuals concern seeking others' approval, and avoiding rejection through the attainment of very close relationships. As a result, anxious-ambivalent individuals are expected to be especially vigilant for signs of disapproval or criticism by others (Collins & Read, 1994).

Whereas anxious-ambivalent individuals aim to decrease the psychological distance between themselves and others, avoidant individuals try to avoid the pain of rejection by attempting to keep others at an emotional and psychological distance (Kobak & Sceery, 1988; Rholes, Simpson & Stevens, 1998). Thus, their interaction goals concern maintaining control and autonomy (i.e. avoiding the need to have to depend on, and trust, others) (Collins & Read, 1994). Consequently, Collins and Read (1994) propose that avoidant individuals should be especially sensitive to perceiving signs of control or intrusion in others' behaviour. They should also attempt to divert their attention away from attachment-relevant cues, effectively denying their attachment needs (Kobak & Sceery, 1988).

In contrast, as a result of positive relationship experiences, secure individuals (low anxiety and avoidance) do not fear rejection and are comfortable with close, supportive relationships. Thus, compared with insecure individuals, they are less concerned with influencing proximity in their interpersonal relationships (Collins & Read, 1994). Confident of being liked and valued, they tend to organise interpersonal interaction around the goals of seeking a balance between autonomy and closeness (Kobak & Sceery, 1988) and maintaining harmony in the relationship (Shaver & Hazan, 1993). As such, secure individuals are not expected to show negative perceptual biases.

Researchers are only just beginning to explore the cognitive processes underlying attachment working models (Collins & Allard, 2001). However, a few studies provide indirect support for the differing goal structures and perceptual biases proposed by Collins and Read. For example, Magai, Hunziker, Mesias, and Culver (2000) conducted a facial decoding experiment in which they asked participants to look at photographs of faces and identify the specific negative emotion being expressed in each case. No specific pattern was found for anxious/preoccupied individuals in this study. However, secure individuals' perceptions were biased towards seeing shame. Magai et al. (2000) suggest that seeing shame in others, instead of other negative emotions, is consistent with the secure goal of relationship reparation, or restoring harmony. For dismissing individuals (high avoidance) a negative

association was found for the perception of anger in the same faces. This is consistent with maintaining the self-reliance goal by attempting to divert attention away from attachment-relevant (or distressing) social information (c.f. Kobak & Sceery, 1988).

Additionally, a survey of attachment style and work orientations by Hazan and Shaver (1990) reveals the interplay between working model goals and person perception in the workplace. Consistent with their goal of relationship closeness anxious-ambivalent individuals preferred to work with others. In addition, they tended to slack off after receiving praise, leading Hazan and Shaver to suggest that anxious-ambivalent individuals' motivation to work reflected their goal of seeking admiration and approval from others. Anxious-ambivalent individuals frequently worried that colleagues or bosses would reject them for poor performance, and they reported feeling misunderstood and under-appreciated. In short, they perceived that they were not valued by their co-workers (Hazan & Shaver, 1990). Unlike anxious individuals, avoidant employees preferred to work alone. In doing so, it can be inferred that they were attempting to maintain their goal of greater autonomy, and prevent a) the need to rely on / trust others, and b) the occurrence of events that might be perceived as co-worker intrusion or interference with their task. Compared with insecure employees, secure individuals showed no significant preoccupation with either closeness or autonomy in their working relationships. Secure individuals reported relatively high satisfaction with co-worker relationships and they perceived that their co-workers valued them highly (Hazan & Shaver, 1990).

Taken together, the theory and research indicate that, in any given relationship interaction, people with different working models may be more likely to attend to and perceive goal-relevant aspects of behaviour that confirm their expectations, while overlooking additional, inconsistent information. In the context of supervisory relationships, this has implications for the types of emotion-eliciting events that employees with differing specific working models are likely to report. Individuals scoring high on anxiety should be especially alert and sensitive to criticism or disapproval from their supervisors, or other signs that they are not valued as an employee. High scores on specific avoidance should be associated with sensitivity to task interference by the supervisor, or lack of autonomy, as well as violations of trust in the relationship.

2.1.3 Event Interpretation

In addition to shaping memory and perceptual processes, working models are proposed to guide the ways in which individuals make sense of their relationship experiences (Collins, 1996; Collins & Read, 1994). Essentially, working models, and the beliefs and expectations underlying them, may provide pre-existing, readily accessible interpretations for a multitude of relationship events that resemble past experiences (Baldwin, Fehr, Keedian, Seidel & Thompson, 1993). Alternatively they may act as a source of social knowledge that can be used to construct 'on-line' interpretations of relationship events (Baldwin et al., 1993; Collins, 1996). In particular, Collins and Read (1994) suggest that working models should strongly influence the explanation and attribution process. Because individuals with different working models have very different expectations and beliefs regarding the self and others, they should be predisposed to interpret relationship events in characteristic ways (Collins & Read, 1994).

Collins and Read (1994) did not make specific hypotheses regarding the influence of working models on event interpretation, but it is possible to make predictions based on existing theory and research. For example, the avoidance dimension of attachment is associated with negative views of others, especially the belief that other people are untrustworthy (Bartholomew & Horowitz, 1991). They may therefore be more likely to externalise accountability for negative relationship events, preferring to interpret it as intentional on the part of the relationship partner, and typical of the relationship. The anxiety dimension of attachment is associated with negative views of the self, manifested by feelings of low self-worth (Bartholomew & Horowitz, 1991). According to Blaine and Crocker (1993) low self-esteem individuals approach situations with negative expectations and are more likely than high self-esteem individuals to blame themselves when their expectations are fulfilled. Individuals scoring high on anxiety may therefore be more likely to see themselves as accountable for negative relationship events. However, Mikulincer and Horesh (1999) found that, in their efforts to identify with others, anxious-ambivalent (high anxiety) individuals projected their own self-traits on to other people. Given that these self-traits are largely negative, it means that anxious individuals may tend to assume the worst of people in their interactions with them (Mikulincer & Horesh, 1999). Effectively, for individuals who score high on anxiety, negative views of self and others may be two sides of the same coin. Consistent with this, research has also shown that preoccupied (high anxiety) individuals found it difficult to distinguish between themselves and others on items such as 'I'm different

from others in many ways' (Pietromonaco & Feldman Barrett, 1997). Taken together, individuals scoring high on anxiety may be more likely to attribute the causes of negative events to both themselves and the relationship partner. In contrast low scores on anxiety and avoidance (i.e. secure working models) should be associated with interpreting relationship events in more benign ways that minimise the negative implications for the self and the relationship partner.

Research broadly supports these propositions. Collins (1996) used a dimensional measure of attachment that measured security (comfort with closeness and comfort with depending on others) and anxiety. Participants were presented with a series of potentially negative relationship events and asked to provide attributions for their partner's behaviour. In line with attachment theory predictions, security was associated with more benign attributions for their partner's behaviour. Individuals scoring high on security were less likely to blame themselves for their partner's behaviour, less likely to view their partner as having acted intentionally, and less likely to attribute the behaviour to something global (affecting many areas of the relationship) and stable. Overall, individuals scoring high on anxiety provided the most negative explanations for events. They were more likely to view the events as caused by their partner's negative attitudes and intentions. At the same time, their interpretations reflected low self-worth and a trend towards self-blame.

Other studies have found similar patterns of results using categorical measures of working models. For example, Mikulincer (1998a, Study 2) presented participants with written hypothetical anger-provoking scenarios that systematically varied the ambiguity of the hypothetical relationship partner's hostile intent. Participants were then asked to rate the partner's behaviour in terms of intentionality and hostility. Consistent with predictions, secure individuals (low anxiety and avoidance) only attributed hostile intent to the partner in the scenarios that were designed to show it; anxious-ambivalent individuals (high anxiety) made hostile attributions in the scenarios that were more ambiguous; and avoidant individuals (high avoidance) attributed hostile intent for all scenarios, including those that were purposely written as non-hostile acts. Additionally, in a three-week diary study, Mikulincer (1998c, Study 3) found that secure individuals reported more positive trust episodes with their partners and, consistent with positive other-views, attributed the events to partner intentions and personality. In contrast, both avoidant and anxious-ambivalent individuals reported more negative trust episodes and, consistent with negative models of others, they were more likely

than secure individuals to attribute these events to stable relationship factors (i.e. unlikely to change) and partner personality.

Taken as a whole, these studies provide evidence that insecure working models (high anxiety/avoidance) may predispose individuals to interpret relationship events in a negative light, consistent with their negative interpersonal expectations. Conversely, the more optimistic expectations underlying secure working models (low anxiety and avoidance) may incline individuals towards giving partners the benefit of the doubt. In particular, individuals with avoidant working models of their supervisory relationships (high avoidance) should be more likely to view their supervisors as responsible for negative relationship events, believing that the supervisor's actions were intentional and a stable feature of the relationship as a whole. Individuals with anxious working models of their supervisory relationships (high anxiety) should interpret their supervisors' actions in a negative light, too. However, they may also view themselves as, to some extent, accountable for negative relationship events.

2.2 Emotional Responses

Because individuals with different working models perceive and interpret events in different ways, they should also differ in the way they respond emotionally to events (Collins & Read, 1994). According to Lazarus (1991a) the type of negative emotion experienced in response to an event depends on whether accountability for the event is attributed to oneself or another party. When *another person* is held accountable for a negative outcome anger-related emotions are likely (e.g. anger, annoyance, outrage, frustration). Thus, anger-related emotions are henceforth also referred to as '*other-focused*' negative emotions. On the other hand, if individuals view *themselves* as responsible for the incident anxiety-related emotions will be more common (e.g. anxiety, worry, fear). Thus, anxiety-related emotions are henceforth also referred to as '*self-focused*' negative emotions. Other researchers have suggested additional self- and other-focused negative emotions that may be especially relevant to interpersonal relationships. For example, Lewis (2000) suggests that guilt, shame, and embarrassment are also self-focused, or 'self-conscious' emotions. They result when individuals evaluate the self as having transgressed or failed to live up to internalised standards, rules, or goals in a particular situation. Thus, like anxiety-related emotions, guilt, shame and embarrassment imply a degree of self-blame for events. Vangelisti (1994) investigated the attributions associated with the experience of hurt in relationships and found

that people most commonly blamed the other person for the hurtful event. Other researchers have noted that hurt often accompanies events that lead to anger (Leary & Springer, 2001). Therefore, hurt can also be considered as an other-focused, anger-related emotion. In the light of the evidence reviewed in the previous section concerning attachment-related biases toward self- and other-blame, individuals with different working models should differ in their tendency to experience other-focused and self-focused negative emotions.

Consistent with these ideas, Kafetsios and Nezlek (2002) found that preoccupied individuals (high anxiety) reported feeling more anxious following social interactions, while dismissing (high avoidance) and secure (low avoidance, low anxiety) individuals had significantly lower anxiety scores. In another study, individuals with preoccupied and fearful working models (both characterised by high anxiety) reported greater shame-proneness in response to hypothetical scenarios, compared with secure and dismissing individuals (Lopez, Gover, Leskela, Sauer, Schirmer & Wyssman, 1997). Finally, research on attachment and anger indicates that secure individuals have the lowest anger-propensity compared with insecure individuals (Mikulincer, 1998a), and both anxious-ambivalent and avoidant individuals reacted with anger to unsupportive partners in stressful situations (Rholes, Simpson & Orina, 1999). Overall, these studies support the proposed indirect relationship between working models and negative emotions. The implication is that possessing negative other-models of supervisors (high avoidance) may be more often associated with other-focused, anger-related emotions. Holding negative self-models in the supervisory relationship (high anxiety) may be associated with reacting to events with both other-focused and self-focused negative emotions.

However, the picture regarding the emotional experiences of individuals with different working models is more complex when the direct effects of affect regulation strategies are taken into account. Essentially, attachment working models contain rules concerning how to adapt to emotionally distressing situations (Kobak & Sceery, 1988). Theory and research concerning adult attachment styles and affect regulation (e.g. Kobak & Sceery, 1988; Mikulincer 1998b; Mikulincer & Orbach, 1995) suggest that, in the face of negative situations in relationships, avoidant individuals habitually attempt to suppress emotions and the acknowledgment of distress. They may be especially likely to deny or suppress emotions connoting weakness, such as fear or anxiety (i.e. self-focused emotions) (Consedine & Magai, 2003). This 'minimising' strategy serves a way of denying attachment needs and reinforcing

a sense of self-reliance (Consedine & Magai, 2003). Anxious-ambivalent adults, on the other hand, seem unable to detach from distressing situations. They tend to ruminate over the causes and meanings of the source of distress, and deliberate over related negative thoughts, memories, and emotions. This associative strategy may spark off an escalation and spreading of affect such that the experience of one particular emotion may be automatically followed by the activation of other emotions (Mikulincer & Florian, 2001). In addition, the inability to control these internal processes and experiences may lead anxious individuals to become overwhelmed by intense negative feelings about the self and the social world (Mikulincer 1998b). In contrast, secure individuals (low anxiety, low avoidance) are able to acknowledge negative emotions without being overwhelmed by them (Mikulincer & Florian, 1998).

Two studies in particular serve to illustrate the impact of these differing affect regulation strategies. Bucheim and Mergenthaler (2000) conducted a computer-assisted textual analysis of Adult Attachment Interview transcripts that focused on the current status of individuals' working models and their relationship histories. In line with attachment theory predictions, avoidant individuals used few emotion words and rarely mentioned feelings or admitted to being emotionally vulnerable. Individuals with anxious-ambivalent working models used frequent and varied negative emotion words and spoke with an 'enmeshed' discourse – that is they described their thoughts and feelings as if past events had happened only yesterday. Secure individuals, on the other hand, recounted moderate emotional reactions and demonstrated a balanced and flexible approach to their feelings and thoughts in relation to self and others. In a similar vein, Mikulincer and Orbach (1995) conducted a laboratory study on the processing of emotional memories. Participants were first asked to recall past experiences of anger, sadness, anxiety, and happiness. Then they were asked to rate the intensity of dominant emotions (e.g. sadness in a sad memory) and non-dominant emotions (e.g. anger in a sad memory) for each recalled event. As anticipated, avoidant individuals rated both dominant and non-dominant emotions as significantly less intense than secure and anxious-ambivalent individuals, suggesting that they inhibited the processing of negative memories and emotions. In contrast, anxious-ambivalent individuals rated both dominant and non-dominant emotions as highly intense, seemingly unable or unwilling to prevent the spread of their distress to other emotions. Secure individuals, on the other hand, rated appropriate dominant emotions as highly intense and non-dominant emotions as far less intense. Secure people were therefore better able to acknowledge distress while appropriately differentiating among, and controlling its spread to, other emotions.

As a whole the evidence suggests that, in addition to an indirect influence of working models on emotions via interpretive biases, affect regulation strategies may exert a direct and automatic influence on both the type and intensity of negative emotions experienced (Shaver, Collins & Clark, 1996). In support of this, Collins (1996) found that, compared with secure participants, avoidant individuals reported strong negative interpretations and reduced negative emotions in response to hypothetical relationship events. Anxious-ambivalent individuals also reported strong negative attributions, but believed they would experience very strong negative emotions compared with their secure and avoidant counterparts. These results confirm the indirect influence of working models. In addition, consistent with a direct effects hypothesis, path analysis indicated that event interpretation did not fully mediate the relationship between working models and negative emotions. Overall, in the context of supervisory relationships, taking into account both direct and mediated effects, specific avoidance should be associated with reduced intensity, other-focused emotions (e.g. anger), and denial of self-focused emotions (e.g. anxiety). Specific anxiety in the supervisory relationship should be associated with relatively intense self-focused *and* other-focused emotions.

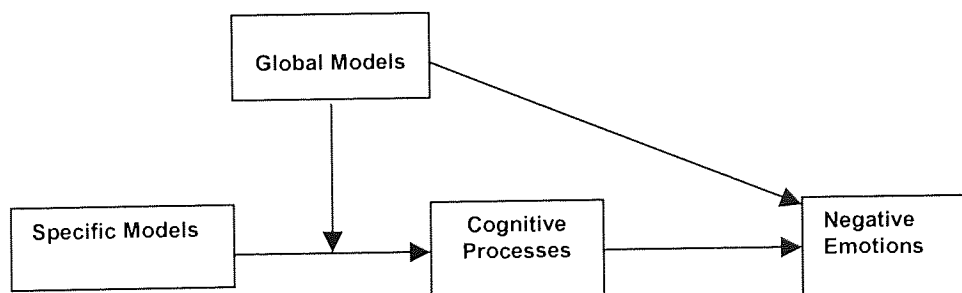
3. Alternative Framework- An 'Interaction Model'

Thus far, the discussion has proceeded on the assumption that specific and global working models of self and other operate concurrently to explain cognitive and emotional reactions in supervisory relationships. Certainly, the small body of research reviewed in the previous chapter is consistent with this interpretation. However, given that the current research is exploratory, alternative explanations are also of interest. In particular, in one of the few recent studies to investigate the joint influence of global and specific models, Pierce and Lydon (2001) found that, in addition to concurrent main effects of global and specific models, global models of self (i.e. global anxiety) moderated the effects of specific models of self in determining the experience of social interactions. For individuals with positive global models of self (low global anxiety), specific models of self were associated more weakly with quality and intimacy of social interactions across individuals' different relationships. In contrast, for individuals with negative global models of self (high global anxiety), the relationships for which they held positive specific models of self were associated with more positive social interactions than the relationships for which their specific models of self were negative. Although the global x specific model of other (avoidance) interaction was not

significant in this instance, Pierce and Lydon (2001) suggest that, overall, positive global models (low anxiety and avoidance) may provide a degree of protection against the effects of holding negative specific models of relationships. Conversely, negative global models (high anxiety and avoidance) may exacerbate the effects of holding negative specific models of relationships.

Thus, in addition to testing the Independent Effects Model, a further question for the present research is whether the relationships between supervisor caregiving, global and specific working models, cognition, and emotions are more accurately described by the Interaction Model shown below in Figure 4.2. (Note that Figure 4.2 shows only the proposed moderated relationship because all other relationships in the model are expected to be the same as those in the Independent Effects Model.) Based on this alternative model, individuals holding negative global models and negative relationship-specific models (high anxiety/avoidance) should be more likely to perceive and interpret events negatively in the supervisory relationship. However, if individuals hold positive global models, the impact on cognition of holding negative specific models of the supervisory relationship should be reduced.

Figure 4.2: *Alternative Framework – The Interaction Model*



4. Summary

Little is known about the nature and causes of negative emotions in the workplace. Emotions most frequently occur as the result of interpersonal events in relationships with other people. Despite this, next to nothing is known about employees' experiences of negative emotions in one of their most important working relationships – the supervisory relationship. Existing theory and research in the domain of workplace emotions are useful in

highlighting the roles of emotion-eliciting events and individual differences in interpretation of those events. However, these approaches do not explicitly take account of the relational context that forms the backdrop to perceiving and responding to events involving a particular relationship partner. Essentially, in order to understand why an event is responded to in a particular way, it is necessary to view it as one episode in the context of an evolving interpersonal history.

It is argued that drawing on attachment theory enables integration of all of these factors. The proposed attachment theory framework integrates the principles of cognitive appraisal theories, and, by acknowledging the importance of interpersonal events in eliciting negative emotions the framework is also consistent with Affective Events Theory (Weiss & Cropanzano, 1996). However, the main strength of an attachment theory approach is that by conceptualising the supervisory relationship as a caregiving relationship it is possible to predict the way that employees and supervisors will relate to each other and, specifically, the type of working models that employees will hold of the relationship. Working models are viewed as a product of employees' relationship histories with their supervisors. As such, they are expected to predispose individuals toward characteristic ways of perceiving, remembering, and interpreting events that occur in the supervisory relationship. In turn, (and in conjunction with the direct effects of affect regulation strategies) interpretation of events should determine the types and intensity of negative emotions that are experienced. In addition to the role of relationship-specific factors, the theory incorporates the influence of more stable, dispositional tendencies in the form of global working models. Global models may exert a smaller, concurrent effect on cognitive and emotional responses, or they may interact with specific models to influence social information processing. Thus, overall, the proposed attachment theory framework indicates that negative emotions are unique products of person and context. The interpretation of events, and emotional reactions to them, are seen as embedded in the interpersonal histories of employees with their supervisors, as well as with others in general. Existing theories of emotions at work cannot fully explain these processes.

In sum, an attachment theory perspective may offer new insights into the processes underlying employees' negative emotional experiences in their supervisory relationships. By focusing on relational context, the proposed theoretical framework addresses a key shortcoming of existing theories of emotions at work, yet remains consistent with their basic tenets. Attachment theory has generated a large body of research that has greatly increased

our knowledge about interpersonal relationships in familial and romantic relationships. However, the theory appears generalisable beyond these domains. By extrapolating the basic principles, attachment theory offers a compelling and parsimonious means of understanding employee negative emotions in supervisory relationships at work. Attachment theory is also clearly and comprehensively articulated. This facilitates the operationalisation of constructs (e.g. supervisor caregiving and supervisor-specific attachment), and the development of hypotheses with which to test the theory, in the context of supervisory relationships. All of these features: the ability to shed new light on an issue (i.e. originality and utility); parsimony; comprehensiveness; and verifiability/testability are key characteristics of good theory in organisational research (Bacharach, 1989; Hall & Lindzey, 1978; Sutton & Staw, 1995). In short, attachment theory extends existing relevant theories of emotion at work and satisfies the criteria associated with a good theory. Taken together, this justifies the selection of attachment theory as the guiding framework for the present research.

Chapter 5: Overview of Research Design and Hypotheses

This chapter provides a brief overview of the series of studies that were conducted for the present research. The overall aim of the research was to use attachment theory as a framework for understanding the nature and causes of employee negative emotional experiences, in the context of supervisory relationships. In order to address this aim, the research design comprised three inter-connected stages:

1. development of a supervisor caregiving scale (SCS)
2. a cross-sectional questionnaire survey
3. follow-up interviews

In the absence of existing suitable measures, a scale assessing employee perceptions of supervisor caregiving was required before the survey could be conducted. The survey was designed to gather data with which to test the attachment theoretical model(s) of employee negative emotions. In the final stage, semi-structured interviews, with a sub-sample of survey respondents, were designed to enable further exploration and extension of the survey findings. Thus, each stage of the research fed in to the next, and contributed towards building a picture of employees' experiences of negative emotions in their relationships with their supervisors. The aims, rationale, design, research questions and hypotheses for each stage of the research are summarised below. The research questions and hypotheses are based on the preceding review of the literature, and guided by the proposed research model(s). Note that the chapter is intended simply as an orienting framework for the rest of the thesis. Detailed discussion of the methodological issues associated with each study will be discussed in later chapters.

1. Stage 1: Scale Development

1.1 Aim

- To use attachment theory as a guide to develop a scale measure of supervisor caregiving.

The concept of supervisor caregiving is integral to the proposed attachment theoretical perspective of employee negative emotions. However, the literature review revealed that the supervisory relationship has not previously been conceptualised as a caregiving relationship. As a result, there were no existing scale measures suitable for assessing employees' perceptions of supervisor caregiving. Therefore, it was necessary to develop a measure

specifically for the study. It was intended that this measure would facilitate the next stage of the research - testing the proposed model(s) of negative emotions in supervisory relationships. Two studies were conducted, using samples of Business School students who had either current, or recent experience of supervisory relationships. The first study (N = 171) focused on selecting scale items, and gathering preliminary psychometric data to ensure that the SCS was valid and reliable. The second study (N = 158) was conducted as a result of revisions to the first version of the scale and sought additional information regarding the psychometric properties of the new scale. Assessing construct validity involves demarcating what a construct 'is and is not' (Clark & Watson, 1995). To this end, in both studies, the associations between SCS and theoretically related and unrelated variables were examined. Specifically, based on the literature review, the following predictions were tested:

1.2 Hypotheses

Study 1

- 1.1 There will be little or no correlation between supervisor caregiving and employees' *global* attachment working models
- 1.2 Supervisor caregiving will be positively correlated with a measure of leader-follower relationship quality
- 1.3 Supervisor caregiving will be positively associated with the frequency of experiencing positive emotions in the relationship with the supervisor, and negatively associated with the frequency of negative emotions

Study 2

- 2.1 Supervisor caregiving will be significantly and negatively associated with avoidant and anxious *specific* attachment working models of the supervisory relationship
- 2.2 There will be a strong correlation between the supervisor caregiving scale and an adapted *categorical* measure of caregiving styles

2. Stage 2: Survey

2.1 Aims

- To replicate and extend the findings of Stage 1 regarding the link between supervisor caregiving and relationship-specific working models of attachment (avoidance and anxiety).
- To investigate the effects of supervisor caregiving and attachment working models (specific and global) on employees' cognitive and emotional reactions in their supervisory relationships

No previous research has investigated negative emotions in supervisory relationships from an attachment theory perspective. Thus, Stage 2 (Study 3) of the present research was intended as a preliminary investigation of the core relationships proposed by the Independent Effects and Interaction models. A secondary goal of the study was to facilitate selection of participants for Stage 3 of the research (based on their scores on a measure of supervisor-specific working models). A questionnaire survey was considered the most appropriate tool for efficiently gathering sufficiently large amounts of data with which to test the research models. The survey was conducted with a sample of nurses (N = 183) employed in an NHS Trust in the UK. Respondents were required to complete the SCS and measures of specific and global working models. They were also asked to indicate how they would interpret and react emotionally to hypothetical negative events occurring in their supervisory relationships. Note that this study measured negative event interpretation in terms of other-blame only. The intention was to use this as a basic test of the mediating role of interpretation before investigating the issue of working models and self- vs. other-blame in greater depth, qualitatively, in the next stage of the research.

Hypothesis testing was organised around five key research questions. The first four research questions investigated the fundamental assumptions underlying an attachment theory perspective of negative emotions in supervisory relationships, namely:

1. supervisor caregiving determines employees' specific working models of the supervisory relationship
2. specific and global working models are related but conceptually distinct constructs
3. specific working models influence cognitive and emotional reactions to relationship events

4. specific working models are more influential than global models in determining cognitive and emotional reactions to events

The fifth research question concerned testing and comparing the Independent Effects and Interaction models. The research questions and associated hypotheses are presented below in the order that they appear in the results chapter for study 3 (see Chapter 8):

2.2 Research Questions and Hypotheses

Q1. *Does supervisor caregiving predict relationship-specific attachment working models?*

- 1.1 Supervisor caregiving will negatively predict specific avoidance
- 1.2 Supervisor caregiving will negatively predict specific anxiety (but the association will be weaker than for specific avoidance)

(Note that the more precise hypothesis for specific anxiety was made in the light of findings from Stage 1.)

Q2. *To what extent are specific and global attachment working models related constructs?*

- 2.1 Global avoidance will account for modest variance in specific avoidance
- 2.2 Global anxiety will account for modest variance in specific anxiety

Q3. *Do specific working models predict negative interpretation of events (e.g. other-blame) and negative emotional reactions?*

- 3.1 Both specific avoidance and specific anxiety will be positively related to negative event interpretation
- 3.2 Specific avoidance will be positively related to other-focused emotions, but there will be little or no relation with self-focused emotions
- 3.3 Specific anxiety will be positively related to both other-focused emotions and self-focused emotions
- 3.4 Specific anxiety will be more strongly related to overall intensity of negative emotions compared with specific avoidance

Q4. *What are the relative contributions of specific and global working models to the prediction of negative event interpretation and negative emotional reactions?*

- 4.1 Relative to global avoidance, specific avoidance will make a greater contribution to the prediction of event interpretation

- 4.2 The influence of global anxiety is expected to be quite strong. Nevertheless, specific anxiety will be at least as important as global anxiety in predicting event interpretation
- 4.3 Relative to global avoidance, specific avoidance will be a predictor of greater importance for overall negative emotions and other-focused negative emotions, although neither attachment model is expected to strongly predict self-focused emotions
- 4.4 Relative to global anxiety, specific anxiety will be a predictor of equal or greater importance for overall emotional intensity, other-focused emotions, and self-focused emotions
- 4.5 The combined effects of specific anxiety and specific avoidance (i.e. relationship-specific attachment) will account for significant variance in event interpretation over and above the variance accounted for by the combined effects of global anxiety and global avoidance (i.e. global attachment)
- 4.6 The combined effects of specific anxiety and specific avoidance (i.e. relationship-specific attachment) will account for significant variance in emotion outcomes (overall intensity, other- and self-focused) over and above the variance accounted for by the combined effects of global anxiety and global avoidance (i.e. global attachment)

Q5. *Are the relationships underlying the associations between supervisor caregiving, attachment working models (global and specific), event interpretation, and negative emotional reactions best described by an 'Independent Effects Model' (Chapter 4, Figure 4.1), or by an 'Interaction Model' (Chapter 4, Figure 4.2)?*

Independent Effects Model

The hypotheses associated with the previous four research questions constituted tests of the majority of main effects proposed by the Independent Effects model. The model also suggests three mediated relationships. Therefore, in order to test the model fully, the paths concerning the indirect/mediated effects of the model were examined. The main effects of supervisor caregiving and event interpretation were investigated first, however, since these paths are also relevant to ascertaining the existence of the mediated relationships.

The mediating role of specific working models

- 5.1 Supervisor caregiving will be directly and negatively related to event interpretation

- 5.2 Supervisor caregiving will contribute to event interpretation, mediated by specific anxiety and specific avoidance

The mediating role of negative event interpretation (e.g. other-blame)

Given that self-focused emotions are thought to be primarily associated with attributions of self-blame, it was anticipated that a measure concerning other-blame would account for little variance in this type of negative emotions. In consequence, event interpretation was not expected to mediate the relationship between working models and self-focused emotions. Specifically, it was hypothesised that:

- 5.3 Event interpretation will be directly and positively related to overall intensity of negative emotions and other-focused emotions, and there will be little or no association with self-focused emotions
- 5.4 Event interpretation will partially mediate the joint effects of specific and global attachment on overall negative emotions and other-focused emotions, but not self-focused emotions

The four-stage mediation of the relationship between supervisor caregiving and negative emotional reactions

- 5.5 Supervisor caregiving will be directly and negatively related to overall negative emotions, other-focused emotions, and self-focused emotions
- 5.6 The relationship between supervisor caregiving and negative emotion outcomes (except self-focused emotions) will be sequentially mediated by specific working models (anxiety and avoidance) and, in turn, event interpretation

Interaction Model

As discussed in Chapter 4, the Independent Effects and Interaction models are identical in every respect except for the proposed interaction between specific and global models in determining event interpretation. The following hypotheses tested whether or not individuals' global working models functioned as moderators:

5.7 Global avoidance will moderate the relationship between specific avoidance and interpretation of events

5.8 Global anxiety will moderate the relationship between specific anxiety and interpretation of events

3. Stage 3: Interviews

3.1 Aim

- To obtain an in-depth, qualitative understanding of the roles of supervisor caregiving, and specific attachment working models, in employees' 'real-life' experiences of negative emotions in their supervisory relationships

Stage 3 (Study 4) was designed to enrich and extend the findings gathered in the preceding, quantitative study. This was considered an important additional step given the exploratory nature of the research. The study was guided by the overall research framework but was not intended as an explicit test of the models. Specifically, in contrast to the quantitative, hypothetical data collected in Study 3, the qualitative approach of Study 4 was designed to enable insight in to actual examples of supervisor caregiving perceptions, the operation of specific working models, descriptions of negative relationship events, and reactions to them.

The literature review indicated that when individuals interact with, or think about a particular relationship partner, relationship-specific working models (as opposed to global) are activated. Thus, semi-structured interviews were conducted with 24 nurses, selected on the basis of their supervisor-specific working model scores obtained in Study 3. The purpose of the study was to compare the emotional and relationship experiences of individuals with different specific working models. Therefore, the sample was sub-divided in to 9 avoidant individuals (high scores on avoidance, low scores on anxiety) and 8 anxious individuals (high scores on anxiety, low scores on avoidance). In addition, to provide a baseline/benchmark in relation to the two insecure groups, 7 secure individuals were also interviewed (low scores on both dimensions).

The interview contained two main sections. The first section explored the nature and impact of individuals' experiences of supervisor caregiving. The goal was to investigate

whether the caregiving experiences of individuals with different working models were consistent with attachment theory predictions (drawn primarily from the infant-caregiver literature). The second section adopted a critical incident approach in order to explore the nature and consequences of negative emotion-eliciting events that had occurred recently in employees' supervisory relationships. Of particular interest were working model differences in event themes, interpretations, emotional reactions, and longer-term relationship consequences. Listed below are the research questions and hypotheses that guided the study (for ease of reference the numbers beside hypotheses correspond to the numbers used in the results chapter for Study 4 (see Chapter 10):

3.2 Research Questions and Hypotheses

Q1. How do employees with different supervisor-specific attachment working models describe and evaluate their working relationships with their supervisors?

1.1 Secure Working Models

- 1.1.1 Overall, individuals with secure specific working models will be satisfied with their supervisory relationships
- 1.1.2 Secure individuals will describe their supervisors as providing high quality, sensitive and responsive caregiving
- 1.1.3 Secure individuals' accounts will not show any signs of preoccupation with unmet attachment needs
- 1.1.4 Consistent with their interaction goals, secure individuals will be happy for the relationship to continue unchanged

1.2 Avoidant Working Models

- 1.2.1 Overall, individuals with avoidant specific working models will either idealise, or play down, the poor quality of their supervisory relationships
- 1.2.2 Avoidant individuals' descriptions of their supervisors' caregiving behaviour should nevertheless indicate a clear lack of acceptance, sensitivity and responsiveness
- 1.2.3 Avoidant individuals will report responding to the described relationship dynamic in a manner consistent with their avoidant working models (e.g. emphasis on self-reliance)

- 1.2.4 Consistent with their interaction goals, avoidant individuals should desire greater autonomy, or independence, in the relationship for the future

1.3 *Anxious Working Models*

- 1.3.1 Overall, individuals with anxious working models will evaluate their supervisory relationships as average, or worse than average
- 1.3.2 Compared with avoidant individuals, anxious individuals will describe the supervisor caregiving they receive as relatively more sensitive and responsive but somewhat inconsistent
- 1.3.3 Anxious individuals will report responding to the described relationship dynamic in a manner consistent with their anxious working models (e.g. seeking approval/recognition and closeness from the supervisor)
- 1.3.4 Consistent with their interaction goals, anxious individuals should desire closer relationships with their supervisors in the future

Q2. *In what ways are differences in specific working models associated with:*

- a) *The frequency and nature of 'real-life' negative interpersonal events experienced by employees in their supervisory relationships?*
- b) *The cognitive, emotional, and relationship outcomes of 'real-life' negative interpersonal events?*

2.1 *Secure Working Models*

- 2.1.1 Secure individuals will report having experienced fewer negative interpersonal events than insecure individuals
- 2.1.2 Secure individuals' accounts of events will not contain insecure attachment themes (e.g. trust or closeness issues)
- 2.1.3 Secure individuals will tend to give their supervisors the benefit of the doubt when interpreting the causes of events
- 2.1.4 Secure individuals will report expressing appropriate negative emotional reactions of moderate intensity
- 2.1.5 Being confident in the durability of relationships, secure individuals should not have any concerns about lasting damage to the relationship as a result of negative events

2.2 *Avoidant Working Models*

- 2.2.1 Avoidant individuals will report a greater number of negative interpersonal events than secure individuals
- 2.2.2 Avoidant individuals' accounts of events will contain avoidant attachment themes concerning the need for autonomy and/or lack of trust in the supervisor
- 2.2.3 Avoidant individuals will tend to blame their supervisors for the events
- 2.2.4 Avoidant individuals will report mostly other-focused negative emotions (e.g. anger), but will downplay the intensity of their reactions
- 2.2.5 Based on their goal of self-reliance and repressive affect regulation strategies, avoidant individuals should appear relatively unconcerned about the impact of events for the relationship

2.3 *Anxious Working Models*

- 2.3.1 Anxious individuals will also report more numerous negative interpersonal events compared with secure individuals
- 2.3.2 Anxious individuals' accounts of events will contain themes relating to lack of closeness and/or lack of approval on the part of the supervisor
- 2.3.3 Anxious individuals will make conflicting attributions for the causes of the events, including both self- and other-blame
- 2.3.4 Anxious individuals will report reacting to events with other- and self-focused (e.g. guilt, embarrassment) negative emotions of relatively strong intensity
- 2.3.5 With their tendency to ruminate on negative emotional experiences, anxious individuals should appear concerned about the longer-term impact of events on their relationships with their supervisors

To summarise, this chapter has given a brief overview of the tri-partite research design, and associated hypotheses, for the present programme of exploratory research. The first stage was designed to ensure appropriate tools with which to conduct the research; the second stage to provide an empirical test of the relationships among supervisor caregiving, working models of attachment, cognition, and negative emotions; and the third stage to enhance our knowledge of these relationships, focusing on 'real-life' employee experiences. In the remaining chapters of the thesis, the method and results for each stage are presented and discussed, commencing with Stage 1 – development of the SCS.

Chapter 6: Development of the Supervisor Caregiving Scale

A scale measure of caregiving

This chapter describes Study 1 and Study 2 that formed the first stage of the research. The studies were designed to develop a scale measure of supervisor caregiving. The first section of the chapter outlines the aims of this part of the research programme. This is followed by details of the method and results of Study 1. The next section outlines the method and results of Study 2. The chapter concludes with a summary and discussion of both studies.

1. Aim

To recap the argument developed in the previous chapters, attachment theory may provide an alternative framework for understanding employee-supervisor relationships and their impact on employees' experiences of negative emotions at work. It is argued that quality of supervisor caregiving is a key factor in the development of specific working models of the employee-supervisor relationship. Working models in turn may account for employees' differing cognitive and emotional experiences of supervisory relationships. The aim of the research described in this chapter was to use attachment theory as a guide to develop a measure of supervisor caregiving. The measure was intended to enable further investigation of the broader propositions of the thesis.

Two studies were conducted. In the first study, items were generated and evaluated for inclusion in a scale measure of supervisor caregiving. The scale was then tested alongside existing measures in order to examine its psychometric properties. From the preceding discussion, it was expected that supervisor caregiving would be positively correlated with a measure of leader-follower relationship quality, but only weakly or insignificantly associated with employees' global models of attachment. In addition, it was anticipated that caregiving would be positively associated with the frequency of experiencing positive emotions in the relationship with the supervisor, and negatively associated with the experience of negative emotions.

The purpose of the second study was to partially replicate and extend the findings of the first study using a revised version of the supervisor caregiving scale. It was hypothesised that supervisor caregiving would be negatively correlated with both anxious and avoidant

attachment to the supervisor. It was also predicted that there would be a close correspondence between the supervisor caregiving scale and an adapted categorical measure of caregiving styles.

2. Study 1

2.1 Method

This section describes the methods and procedures used to develop the scale items, and test the psychometric properties of the first version of the measure.

2.1.1 Item Generation

Prior to writing and selecting items for inclusion in the scale, a review of existing measures in the related areas of leadership, social support, and the psychotherapeutic relationship was undertaken (e.g. Bass's MLQ, 1985; Caplan et al.'s Social Support scale, 1975; Stogdill's LBDQ, 1963). Items that appeared congruent with the concepts of maternal caregiving (Ainsworth et al., 1978) and organisational caregiving (Kahn, 1993; 1998) were retained. In particular, some items from the 'bond' and 'partnership' dimensions of the therapeutic working alliance, or client-therapist counselling relationship, (see ARM, Agnew-Davies, Stiles, Hardy, Barkham & Shapiro, 1998) were viewed as conceptually similar to the notions of acceptance and co-operation/interference as discussed by Ainsworth and colleagues. Overall, however, existing scales and items did not sufficiently match the breadth of the construct of caregiving operationalised here, so the majority of items were newly developed.

Items were designed to represent the key aspects of the construct illustrated in Figure 3.1 (Chapter 3), that is: awareness, understanding, acceptance, accessibility, promptness, appropriateness, collaboration, and consistency. Given Ainsworth et al.'s assertion that the different aspects of maternal caregiving are highly inter-related, the aim in writing items was to cover the conceptual ground, rather than derive mutually exclusive dimensions of supervisor caregiving behaviour. According to Kline (2000) a good scale consists of an adequate sample from the hypothetical universe of possible items. Therefore, between three and five items were written for each hypothesised aspect of supervisor caregiving. Following

recommendations for good practice in psychometric test construction (Kline, 2000; Nunnally, 1978), care was taken to ensure that items were brief, unambiguous, and referred to specific supervisor behaviours. At least one negatively worded (i.e. reverse-scoring) item was included for each aspect of the construct. This was intended to facilitate the construction of a balanced scale that would reduce response set bias due to acquiescence (Kline, 2000). An initial pool of 30 items was generated (see appendix 1).

2.1.2 Item Rating

The item pool was randomised and evaluated for construct fidelity by seven organisational researchers. The raters were briefed about the concept of supervisor caregiving by the researcher. Following the briefing, each rater was given a pack containing: the 30 items typed onto 30 individual slips of paper; written definitions of each aspect, or category, of the supervisor caregiving construct; and a form for evaluating each item. Raters were required to read the definitions and manually sort each item slip into what they believed to be the most appropriate category for that item. After sorting, raters were asked to record for each item: a) to which of the categories (if any) does the item best belong? and, b) how well does the item encapsulate the meaning of the category? The degree of fit between each item and the supplied category definitions was rated on a 5-point Likert scale. A rating of one indicated that the item was a very poor fit with the dimension. A rating of five meant that the item was considered to be a very good fit with the dimension. In addition, raters were asked to comment on any difficulties or ambiguities perceived in the wording of the items. (The materials used in this rating exercise can be found in appendix 2).

The criteria for retaining items in their original form were that there should be at least 70% agreement regarding category classification (i.e. five out of seven raters agreed), and a mean rating of 4.0 for 'category fit'. Items that failed to meet these criteria (eleven) were re-written, or edited, with the aid of the comments provided by the raters. For example, the item 'My supervisor shows s/he understands my feelings' was originally written for the 'Understanding' category. However, raters were confused by the word 'shows' because it suggested active maintenance behaviour. Thus the item was judged ambiguous, and overall was rated a better fit for the 'Awareness' category. Using this information, the item was re-written as: 'My supervisor understands my feelings'. Because approximately one third of the original items were re-worded, two of the former raters were asked to repeat the evaluation

exercise for the new items. On this occasion, all items were correctly classified and given ratings of at least 4 for 'category fit'. This evaluation exercise resulted in a modified pool of 30 items that were independently judged to be indicative of the key aspects of supervisor caregiving.

2.1.3 Response Format

The 30 items were formatted for use as a questionnaire scale. A seven-point Likert-style response format was selected, requiring an assessment of disagreement/agreement with each item (1 = *strongly disagree*, 7 = *strongly agree*). Empirical research has shown this format to be the most reliable and easy to use (Kline, 2000). The scale was headed with the following instructions: 'The statements below reflect different ways that people describe aspects of their relationships with their supervisors. Indicate how closely each statement fits your own experiences with your supervisor by ticking the one most relevant response'.

2.1.4 Scale Validation

Having established a degree of confidence in the face and content validity of the Supervisor Caregiving items, the next stage was to empirically test the item pool, using a sample of individuals with experience of employee-supervisor relationships (from the perspective of the employee). The goals were to investigate the factor structure and psychometric properties of the Supervisor Caregiving scale, and to derive a shorter scale of about 20 items that best tapped the construct.

2.1.4.1 Sample

In order to ensure the ecological validity of the scale, it was important to select a sample with a broad range of experience across diverse occupational settings. Data were therefore collected from 171 students enrolled on undergraduate and postgraduate management degree programmes at a Business School in the United Kingdom. All participants had experienced an employee-supervisor relationship, in either full- or part-time employment, within the 12 months prior to the study. There were 98 (57%) women and 73 (43%) men in the sample, with a mean age of 27 years (range = 19 to 49 years). Participants had worked in a broad range of occupations located in both the public and private sectors. All occupational levels were represented in the sample, with 1.2% directors, 4.7% senior executives, 8.8% upper-

middle management/senior professional, 20.5% middle management/professional, 10.5% first level management, and 54.4% in non-managerial or staff positions. Mean tenure in the focal employee-supervisory relationship was 1.63 years (range 1 month to 12 years).

2.1.4.2 Procedure

The measures were produced as a questionnaire pack (see appendix 3). During normal teaching time, the researcher visited three classes of students and asked for their assistance in a study concerning “employees’ experiences of their working relationships with their supervisors”. It was stressed that participation was voluntary and all responses would be anonymous. The questionnaire pack was then distributed to participants. A cover page on the front of the pack explained the aims of the research, and gave details of how to complete the pack. The researcher talked through this information and reminded participants to answer all questions with their first reactions. This was an important point to stress since mulling over questions instead of providing an instantaneous, uncensored response can be a major source of unreliability in responding (Kline, 2000). After asking if there were any questions, the researcher asked participants to begin completing their questionnaires. Participants remained in their lecture theatres and completed the questionnaires in silence. The researcher stayed at the front of the room ready to answer any queries should they arise. The majority of students took just over ten minutes to complete the questionnaire. Completed questionnaires were handed in person to the researcher. Participants were then debriefed and thanked for their participation. No course credit or other incentives were offered during the recruitment of participants. The response rate was 100%.

2.1.4.3 Measures

Alongside the Supervisor Caregiving Scale (SCS) items, participants were asked to complete three additional measures and provide some background details.

Relationship Quality. The LMX-7 (Graen & Uhl-Bien, 1995) is a 7-item self-report measure designed to assess the quality of the working relationship between an employee and his/her supervisor. Specifically, this measure is thought to tap three underlying dimensions of the employee-supervisor relationship – mutual respect, trust and obligation (Graen & Uhl-Bien, 1995). The scale can be adapted to assess the relationship from the perspective of either

party. The employee form of the measure was used in this study. Each item is responded to on an individually tailored 5-point scale. For example, "How well does your leader recognize your potential?" is responded to on a scale ranging from "Not at all" to "Fully", and the response scale for "How would you characterize your working relationship with your leader?" runs from "Extremely Ineffective" to "Extremely Effective". Graen and Uhl-Bien (1995) report Cronbach alpha coefficients consistently falling within the .8 - .9 range. Cronbach's alpha for the present study was .89.

Global Attachment. An existing self-report measure of adult attachment was modified for use in the current study. Previous researchers (e.g. Tidwell, Rice & Shaver, 1996) have used measures of adult romantic attachment to explore the effects of global attachment working models both within, and outside of, the close relationship domain. However, Bartholomew and Shaver (1998) suggest that greater statistical and explanatory power may be achieved when attachment is measured in the domain most appropriate to the context of study. In this study, it was expected that working models associated with attachment to peers (defined as an individual's 'other important relationships'), would be more relevant to the workplace than romantic attachment working models.

The measure used here was therefore an adaptation of the multi-item measure of Adult Romantic Attachment (Brennan, Clark & Shaver, 1998). The scale items were reworded to focus on relationships with 'others' instead of 'my partner'. Brennan, Clark, and Shaver (1998) derived two orthogonal/minimally related scales, Avoidance and Anxiety, by amalgamating the majority of existing self-report measures of romantic attachment. This comprehensiveness, combined with high internal consistency reported by Brennan, Clark, and Shaver (1998) (Cronbach's alphas exceeding .9 on both scales), may give greater measurement precision than could be achieved by adapting alternative attachment scales.

Each modified scale comprised 17 items. "I am nervous when people get too close to me", and "I don't feel comfortable opening up to other people" are examples of the Avoidance items. Examples of the Anxiety items include "I worry a lot about my relationships with others", and "I find that other people don't want to get as close as I would like". Participants responded to all items on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Given that the items had been adapted, principal axis factor analysis was run on the items. The results confirmed that the items loaded as expected on the two dimensions

of global attachment (results of factor analysis in appendix 6). Alphas for the dimensions were .89 for global avoidance and .90 for global anxiety.

Frequency of Emotional Experiences A brief measure was developed specifically for this study in order to assess the extent to which employees had typically experienced positive and negative emotions in their relationships with their supervisors. In the interests of brevity, the measure consisted of a small number of emotion terms chosen according to two criteria:

1. The emotions were agreed by many emotion theorists to be ‘basic’ – the super-ordinate emotions of which all others are a part (e.g. Ortony, Clore & Collins, 1988);
2. Research had shown the emotions to be relevant to the workplace (e.g. Basch & Fisher, 2000).

The chosen positive emotions were “happiness”, “pride” and “gratitude”. The negative emotions were “anger/irritation”, “sadness”, “guilt/shame”, “embarrassment”, “anxiety/fear”, and “contempt”. Participants rated how frequently they tended to experience each of these emotions in the supervisory relationship using a 5-point scale (1 = *never*, 5 = *very frequently*). Principal axis factor analysis revealed two factors that were clearly interpretable as positive and negative emotions (see appendix 6). Two scales, labelled ‘positive emotions’ and ‘negative emotions’, were formed. Scores on each scale were derived by averaging scores across the positive and negative emotion items respectively. Alpha for the positive emotions scale was .76. The negative emotions scale had an alpha coefficient of .82.

Background Details Participants were asked to provide personal information including: age, gender, job title, occupational level, organizational tenure, length of supervision relationship, and type of contract (full- or part-time).

2.2 Results

2.2.1 Exploratory Factor Analysis

The suitability of the supervisor caregiving data for factor analysis was investigated using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. This measure indicates the amount of shared variance in the item pool and can vary from zero to one. Values of 0.6 or above are required for good factor analysis solutions (Tabachnick & Fidell, 1989). The KMO index for the 30 items was .96. In addition, the Bartlett test of sphericity

was significant ($p < .001$) indicating that the 30-item correlation matrix was significantly different from a matrix of essentially uncorrelated items. As a final check, the 30 x 30 correlation matrix was visually inspected to ensure that all items were significantly correlated with each other. Items will not factor unless they correlate with other items in the matrix (Hair et al., 1998; Tabachnik & Fidell, 1989). While the majority of items were moderately and significantly correlated with each other, a single item did not correlate significantly with the majority of other items ('My supervisor empowers me to take responsibility for my problems, rather than be dependent on him/her'). This item was therefore excluded from subsequent analysis.

The remaining 29 supervisor caregiving items were subjected to exploratory principal axis factor analysis, with oblique rotation to extract non-orthogonal factors. This method of factor analysis was the most appropriate given that a) the goal was to explore the number of latent factors underlying the supervisor caregiving construct, and b) any factors were expected to be correlated (Hair et al., 1998; Stevens, 1996; Tabachnick & Fidell, 1989). Using the scree slope as a guide, three factors with eigenvalues greater than one were extracted. These factors accounted for 52.8%, 6.0% and 4.9% of the variance respectively. The results of the factor analysis are shown in Table 6.1.

2.2.2 Item Reduction

The goal was to develop an instrument of no more than 20 items. The instrument needed to be long enough to adequately cover the theoretical content of the construct, yet brief enough to reduce the burden on respondents completing the measure. Items were selected according to two criteria:

1. statistical, requiring loadings of at least 0.4 on the factor (and higher than the item's other loadings);
2. conceptual, requiring item content to be theoretically core and semantically differentiated from other items.

Table 6.1: *Factor Analysis of the SCS: Study 1 Factor Loadings – first run*

| Scale Items | Factor | | |
|---|------------|------------|-------------|
| | 1 | 2 | 3 |
| My supervisor shows an interest in my well-being | .75 | .09 | .11 |
| My supervisor accepts me no matter what I say or do | .44 | .28 | .09 |
| My supervisor and I work together to identify solutions to my problems | .65 | .02 | -.13 |
| Whenever possible my supervisor provides support without delay | .68 | -.02 | -.33 |
| I know my supervisor's door is always open if I need to discuss a problem | .68 | .08 | -.14 |
| If anything can be done to help me resolve a work problem, my supervisor will take the most suitable course of action | .65 | .04 | -.32 |
| My supervisor notices when I'm feeling down or stressed | .82 | -.10 | .11 |
| My supervisor accurately perceives my needs and concerns | .71 | .09 | -.08 |
| My supervisor responds promptly when I request help or advice | .56 | -.08 | -.52 |
| My supervisor is always happy to sit and listen if ever I have any worries | .71 | .03 | -.15 |
| My supervisor's behaviour towards me is consistently sensitive | .64 | .27 | .06 |
| My supervisor keeps up to date with my needs and concerns | .71 | .11 | -.13 |
| My supervisor is warm and friendly with me | .55 | .33 | .11 |
| My supervisor is good at seeing things from my perspective | .59 | .32 | -.02 |
| My supervisor promptly acknowledges my concerns, even if s/he is unable to help me straight away | .54 | .19 | -.17 |
| If I have a problem my supervisor is there for me | .77 | .14 | -.09 |
| My supervisor deals with my concerns in a suitable manner | .62 | .16 | -.19 |
| My supervisor remembers personal information about me | .83 | -.14 | .19 |
| My supervisor acts swiftly on his/her word | .62 | -.13 | -.36 |
| My supervisor understands my feelings | .74 | .19 | .12 |
| I can never be sure how my supervisor will react when I go to him/her with a problem (R) | .04 | .56 | -.21 |
| My supervisor is critical of me (R) | -.03 | .52 | .00 |
| In response to my concerns about work, my supervisor follows his/her own plans, ignoring my views of how to proceed (R) | .12 | .56 | -.20 |
| My supervisor often seems irritable or impatient with me (R) | .13 | .73 | .09 |
| My supervisor tries to impose his/her opinions on me when we discuss solutions to my problems (R) | .11 | .63 | -.06 |
| My supervisor is not available when I need him/her most (R) | .02 | .36 | -.60 |
| My supervisor does not respond to my requests for support as quickly as I would like (R) | .10 | .32 | -.56 |
| My supervisor finds it hard to understand me (R)* | .31 | .38 | .03 |
| My supervisor does not address my needs and concerns appropriately (R) * | .32 | .37 | -.29 |

Note: Table shows pattern matrix figures; Highest factor loading shown in bold;

R denotes reverse-scored item; * items screened out by .4 cut-off criterion.

In the rotated factor solution 20 out of the 29 items loaded highly on the first factor. Two items were screened out by the 0.4 cut-off criterion. Together, the 20 items on Factor 1 appeared to cover all of the conceptual ground theorised to represent supervisor caregiving. The items loading on the second and third factors (containing five items and two items respectively) were examined next to see if they added anything conceptually to the first factor.

The two items forming Factor 3 had originally been written to assess supervisors' accessibility and promptness. These areas were already well represented in Factor 1, and it was judged that these two items had most likely factored separately because of a subtle semantic difference relative to the Factor 1 accessibility and promptness items. For example, "My supervisor does not respond to my requests for support *as quickly as I would like*" may elicit a more subjective response than "My supervisor promptly acknowledges my concerns...". Essentially, the former item may say more about the respondent than the supervisor. In the light of this, the Factor 3 items were deleted.

The five items comprising Factor 2 were all negatively worded. According to Kline (2000) it is extremely difficult to write items that mean the exact opposite of each other, and this seems to be borne out by the clustering of these items. Overall, two issues justified merging the two factors into a single scale. Specifically:

- There was a fairly strong correlation between Factors 1 and 2 ($r = .60, p < .001$)
- It was desirable to retain some negatively worded items in the scale as a whole (to reduce response bias).

As a precaution, coefficient alpha for the composite scale was examined. Results indicated that merging the factors would not adversely impact on the level of internal reliability. Thus, the 25 merged items were screened for semantically redundant statements, which were subsequently deleted. Following the removal of superfluous items, the factor analysis was re-run in order to verify the final structure of the resulting 20-item scale. The items and factor loadings are shown in Table 6.2. Consistent with the preliminary factor analysis, the reverse-scored items loaded on a separate factor. The main factor accounted for 55% of variance, while the smaller factor accounted for just 4% of variance. Note also that the correlation between the two factors rose to .68 ($p < .001$) in this final version of the scale. These facts together reinforced the value of treating all items as a single scale.

Table 6.2: *Factor Analysis of the SCS: Study 1 Factor Loadings after item selection*

| Scale Items | Factor | |
|---|------------|------------|
| | 1 | 2 |
| 1. My supervisor shows an interest in my well-being | .73 | .05 |
| 2. My supervisor accepts me no matter what I say or do | .44 | .22 |
| 3. My supervisor deals with my concerns in a suitable manner | .66 | .22 |
| 4. My supervisor often seems irritable or impatient with me R | .19 | .60 |
| 5. My supervisor and I work together to identify solutions to my problems | .71 | .01 |
| 6. My supervisor notices when I am feeling down or stressed | .82 | -.18 |
| 7. Whenever possible my supervisor provides support without delay | .74 | .08 |
| 8. My supervisor accurately perceives my needs and concerns | .77 | .07 |
| 9. My supervisor is always happy to sit and listen if ever I have any worries | .79 | -.01 |
| 10. My supervisor tries to impose his/her opinions on me when we discuss solutions to my problems R | .08 | .74 |
| 11. My supervisor's behaviour towards me is consistently sensitive | .64 | .24 |
| 12. My supervisor keeps up to date with my needs and concerns | .77 | .11 |
| 13. My supervisor is warm and friendly with me | .55 | .24 |
| 14. My supervisor promptly acknowledges my concerns, even if s/he is unable to help me straight away | .58 | .23 |
| 15. My supervisor is good at seeing things from my perspective | .63 | .26 |
| 16. If I have a problem, my supervisor is there for me | .83 | .10 |
| 17. My supervisor acts swiftly on his/her word | .71 | -.04 |
| 18. My supervisor remembers personal information about me | .80 | -.22 |
| 19. In response to my concerns about work, my supervisor follows his/her own plans, ignoring my views of how to proceed R | .15 | .69 |
| 20. My supervisor understands my feelings | .75 | .09 |

Note: Table shows pattern matrix figures; Highest factor loading shown in bold; R denotes reverse-scored item.

2.2.3 Internal Reliability

The means, standard deviations and reliability coefficients for the SC scale and the other instruments used in the study are reported in Table 6.3, together with the correlations between SCS and the other measures administered in the study. The internal consistency of the Supervisor Caregiving scale was analysed by calculating Cronbach's alpha for the 20 items. The alpha coefficient was 0.96, indicating a high degree of internal homogeneity. Very high alphas are to be expected when a single dimension is assessed using a large number of items,

since reliability coefficients are a function of both the inter-item correlations and the number of items in the scale (Hair et al., 1998; Clark & Watson, 1995). In such cases, the alpha coefficient alone may not be a sufficient index of reliability.

Table 6.3: *Psychometric Properties of the SCS: Means, standard deviations, reliability coefficients and correlations in Study 1.*

| Variable | Mean | Std Dev | Alpha | Correlation with SC |
|--------------------------------|------|---------|-------|---------------------|
| SC ¹ | 4.60 | 1.19 | .96 | - |
| LMX ² | 3.44 | .80 | .89 | .87*** |
| Global Avoidance ¹ | 3.18 | .90 | .89 | .09 |
| Global Anxiety ¹ | 3.41 | .96 | .90 | .00 |
| Positive Emotions ² | 3.41 | .76 | .76 | .72*** |
| Negative Emotions ² | 2.28 | .72 | .82 | -.64*** |

Note: SC = Supervisor Caregiving; LMX = Leader Member Exchange;

¹ indicates measures with a 7-point scale range; ² indicates measures with a 5-point scale range

*** p < .001

In particular, if items are very highly correlated alpha will be high. However, high inter-item correlations also suggest that items are highly similar to each other in content and thus may only measure a narrow slice of the intended construct (Clark & Watson, 1995). The inter-item correlations for the scale were therefore inspected as a further check. Inter-item correlations for the supervisor caregiving items ranged from .32 to .77 with a mean of .57, suggesting that the items were generally moderately related, but not so similar as to be conceptually redundant.

2.2.4 Discriminant Validity

The key theoretical assumption underpinning the construct of supervisor caregiving is that individuals are able to form multiple attachment working models, each specific to a particular important relationship. It was hypothesised that it is relationship-specific working models, rather than global working models, that most strongly influences perceptions, cognitions and behaviours within a given relationship. It was expected that there should be little or no correlation between respondents' global attachment working models (a pre-existing personality construct) and reports of supervisor caregiving. The Pearson-product moment correlations between supervisor caregiving and global attachment can be seen in Table 6.3. In line with the prediction, there was no significant correlation between supervisor caregiving and either of the avoidance or anxiety subscales of Global Attachment. This

suggests that perception of the degree of supervisor caregiving is not a function of the more general beliefs held by individuals regarding other salient or significant relationships.

2.2.5 Concurrent Validity: Relationship Between SCS and LMX

The concurrent validity of the supervisor caregiving scale was assessed by correlating supervisor caregiving scores with scores on the LMX-7 and a measure of the frequency of positive and negative emotional experiences in the employee-supervisor relationship. LMX was chosen as a representative measure of overall working relationship quality in the employee-supervisor relationship. It was expected that supervisor caregiving would be strongly and positively associated with LMX. Employees who perceive their supervisors as sensitive, responsive, and effectively providing a secure base in times of need, should also report having higher quality working relationships with their supervisors in the broader sense, as captured by leader member exchange theory and the LMX-7 scale. Table 6.3 shows that the findings supported the prediction. Note that a Pearson correlation of .87 ($p < .001$) is very high, and is sufficient to warrant speculation that there may be considerable overlap between the two constructs. In order to determine the extent to which supervisor caregiving provides information redundant with the pre-existing LMX measure, a hierarchical regression of supervisor caregiving on LMX, controlling for length of supervision, was conducted. The Adjusted R Square was .77, suggesting that almost a quarter of the variance is unique to supervisor caregiving. Thus, empirically, supervisor caregiving appears to be congruent, but not redundant with, an existing measure of working relationship quality.

It is also important to note that the high simple and multiple correlations between the constructs may, in part, also be accounted for by methodological artefact. Previous researchers investigating leader behaviour constructs have noted consistently high correlations between constructs regardless of the instruments used (e.g. Arnold, Arad, Rhoades & Drasgow, 2000). This is taken as evidence that all leader behaviours may be substantially related and, moreover, subject to a halo effect when assessed by self-report measures (Arnold et al., 2000). In the present study, the correlations may have been further artificially inflated by the fact that participants were reporting on retrospective experiences. It seems reasonable to assume that some of the nuance of supervisors' behaviour may have been lost in the intervening time between the termination of the working relationship and participation in the study, leading to a more generic good-bad recollection of the relationship.

This might have reduced participants' abilities to make finer-grained distinctions between the different scales and their respective items.

2.2.6 Concurrent Validity: SCS and Frequency of Emotions

Frequencies of positive and negative emotions were included in the study as outcome measures. According to the literature, leader/supervisor behaviours may directly influence the likelihood that employees will experience positive/negative emotions (e.g. Weiss & Cropanzano, 1996). Hence, a link was expected between degree of supervisor caregiving and employee self-reports of emotional experiences in the employee-supervisor relationship. It was expected that perceptions of high supervisor caregiving would be positively associated with positive emotions and negatively associated with negative emotions. Table 6.3 shows the Pearson product moment correlations between supervisor caregiving and the composite positive and negative emotion scales. The results were in line with predictions, suggesting a strong relationship between degree of supervisor caregiving and the frequency and type of emotions that are experienced within the working relationship as a whole. It should be noted that these correlations are again high (.72 and -.64). In this case it seems less likely to be the result of construct overlap, but may instead be further evidence of the halo and retrospective recall effects discussed earlier.

2.3 Summary

The results of Study 1 indicated two dimensions of supervisor caregiving that function effectively as a single-factor, 20-item scale. The scale demonstrated very good internal reliability. Strong correlations between the scale and LMX and emotional experiences supported the concurrent validity of supervisor caregiving. The absence of an association between supervisor caregiving and global attachment provided evidence of discriminant validity.

3. Study 2

The purpose of Study 2 was to partially replicate and extend the results of the first study. Study 1 provided preliminary evidence about the factor structure, reliability and validity of the SC scale, but there were limitations that needed to be addressed. In the first place, the findings of Study 1 were based on retrospective reports. It was desirable to collect further data from individuals who were currently involved in on-going employee-supervisor working relationships. Secondly, the operationalisation of supervisor caregiving in Study 1 used an *agree-disagree* response format. Subsequently, however, the response anchors were revised to indicate the frequency with which supervisors performed each of the behaviours described by the 20 items (1 = *never*, 7 = *always*). This was believed to capture more accurately the notion that the frequency, or consistency, of sensitive and responsive caregiving behaviours is a key aspect of the construct of caregiving (Ainsworth et al., 1978). Changing the response format in this way necessitated amending the wording of two items in the scale so that their sense was maintained. Thus, the word ‘often’ was removed from ‘My supervisor often seems irritable or impatient with me’; and the word ‘consistently’ was removed from ‘My supervisor’s behaviour towards me is consistently sensitive’.

In the light of these changes it was judged prudent to collect further validity and reliability data. Of particular interest was the relation of the revised SC scale to two other theoretically associated variables suggested by the attachment literature, namely attachment to supervisor and an adapted *categorical* measure of caregiving style. The relationship between the revised SC scale and LMX was also re-examined because of the very high inter-correlation between the two variables in Study 1.

3.1 Method

3.1.2 Sample

Participants were undergraduate management students at a UK Business School. As part of the management degree programme, students were working in organisations for one year as full-time placement trainees. The placement scheme required that all trainees were allocated a supervisor in their organisation. For the majority of individuals, this was their first taste of a supervisory relationship in full-time employment. It was expected that the relative

inexperience of participants would imbue supervisory relationships with greater salience and role significance than might usually be the case for more experienced employees. This should provide fertile ground for the development of attachment working models. Therefore the quality of caregiving received from supervisors was expected to be especially relevant to this sample. The students in the sample were employed in a broad range of roles and functions (e.g. marketing assistants, HR officers, IT support). Organisations ranged in size from small, family-owned businesses to multinational corporations. A total of 280 questionnaires were mailed and 158 were returned, yielding a response rate of 56%. Forty per cent of the sample was male and 60.0% was female. The mean age of respondents was 20.9 years. The average length of time that students had been working in their organisations was 8.5 months.

3.1.3 Procedure

The measures were compiled into a brief questionnaire survey. The researcher then negotiated access to the sample with the Head of the Undergraduate Placement Office for the Business School. At an initial meeting, the researcher presented the questionnaire and the aims and benefits of the research. The aim was described as 'piloting a new measure of supervisory relationship quality'. The key benefits were presented as: an opportunity to obtain accurate insight into placement students' working relationships with their workplace supervisors; provision of recommendations for improving the quality of supervisory relationships for future placement students; and access to the supervisor caregiving scale to enable continued monitoring and evaluation of students' experiences. The contact was keen to pursue the research because she was planning to write a new booklet giving guidance to workplace supervisors on working effectively with Aston placement students. She therefore hoped to use the survey results in drawing up guidelines for best practice. At the same meeting the procedural details for the conduct of the survey were discussed and agreed. Details were finalised via e-mail.

The questionnaire survey was administered by post. It was designed to form part of a routine communications mail-shot by the Undergraduate Placement Office. This was achieved by including a covering letter (jointly written by the researcher and the contact) that primarily provided an update for placement students on issues of relevance to them. The last paragraph of the letter encouraged students to complete the survey that was enclosed with the letter. The letter assured respondents of the anonymity of the information they provided (see

appendix 4). A reply-paid envelope was included for the return of completed questionnaires. Prior to mailing, the envelopes containing the surveys were stamped with 'Confidential' in red ink. The surveys were sent by second-class post to the students' placement organisation addresses. Respondents were given three weeks to complete and return their questionnaires. Following the deadline for returns, all potential respondents were e-mailed by the Placement Office contact to prompt any late responses and/or thank those who had already participated.

3.1.4 Measures

The revised 20-item Supervisor Caregiving scale was administered alongside three other measures: LMX-7 (as in Study 1), Attachment to Supervisor, and Categorical Supervisor Caregiving Style (see appendix 5 for copy of questionnaire).

Supervisor-specific Attachment. A brief, two dimensional measure of Attachment to Supervisor was developed for the study by adapting items from subscales of the measure of Adult Romantic Attachment (Brennan & Shaver, 1998) and the Client Attachment to Therapist Scale (CATS; Mallinckrodt, Gantt & Coble, 1995). Items and instructions were adapted by rewording to refer to participants' experiences with their supervisors, instead of their therapists or romantic partners. As an aid to interpretability and comparability with other attachment measures, the newly adapted scales are labelled *Specific Avoidance* and *Specific Anxiety*. The avoidance scale (six items) is concerned with reluctance to depend on the supervisor and discomfort with closeness in the relationship. An example of an avoidance item is "I prefer not to show my supervisor how I feel deep down". The anxiety scale (five items) relates to a preoccupation with closeness in the supervisory relationship, including a longing to be more 'at one' with the supervisor. An example item is, "I sometimes wonder if I'm my supervisor's favourite employee". Responses to all items on the measure were given on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). Principal axis factor analysis (appendix 6) revealed that the adapted items loaded on to two factors that were fully consistent with the intended specific avoidance and specific anxiety scales. Furthermore, consistent with attachment theory and research on global attachment dimensions, the correlation between the two specific dimensions was modest ($r = .28$, $p < .001$). Cronbach's alpha for the specific avoidance scale was .80. Alpha for the anxiety scale was .65. A reliability coefficient of .65 is below the acceptability limit of .70 that is often cited. However, in practice researchers adopt .60 as an adequate level of reliability (Kline, 2000),

and .60 alphas are considered acceptable for exploratory research such as this (Bryman & Cramer, 1997; Hair et al., 1998).

Categorical Supervisor Caregiving Style A three-item categorical measure of supervisor caregiving style was also included. The items were adapted from a categorical measure of parental caregiving styles, originally developed by Hazan and Shaver (unpub) based on a review of the infant attachment literature. The original items were three brief descriptions depicting a parent who displayed: a) a warm, responsive style; b) a cold, rejecting style; and c) an inconsistent style. The response format required individuals to select the description that most closely matched their own experiences. Subsequently, Collins and Read (1990) used the measure in a study of adult romantic relationships and found that reports of parental caregiving style experienced in childhood correlated in theoretically consistent ways with adult global attachment styles. The present study adapted the measure by changing the wording of the three descriptions to refer to 'my supervisor' (instead of, e.g., 'mother'). Participants were asked to rate, on a 7-point Likert scale, the extent to which each description matched their own supervisor's style. The items were retained separately for analysis so that the relationship between the continuous SCS and each categorical supervisor caregiving style could be examined.

3.2 Results

3.2.1 Exploratory Factor Analysis: Revised SCS

Given that the supervisor caregiving scale was administered in this study using new response anchors (1 = *never*, 7 = *always*) and re-worded items, all items were subjected once again to exploratory principal axis factor analysis, with oblique rotation. Of interest here was the comparison between the factor structure of the revised supervisor caregiving scale against that obtained in the first pilot study. In contrast to Study 1, in which the final 20 items loaded as one large factor and a small second factor, a three-factor structure was found here. The three factors accounted for 48.0%, 5.9% and 3.6% of variance respectively. Each factor appears logically coherent and readily interpretable. Table 6.4 shows the items and their factor loadings. Twelve items loaded on the first factor provisionally labelled "Sensitive-Responsiveness". This factor relates to perceptions of the supervisor as available, responsive, and understanding in times of need.

The second factor, provisionally labelled “Co-operation”, contained four items (three of which are reverse-scored) that appear to tap collaborative problem solving in a secure relational atmosphere. That is, the supervisor is *not* perceived as projecting a critical, rejecting and/or interfering style of relating when employees need help to resolve their difficulties. The final factor again comprised four items. This factor was provisionally labelled “Interpersonal Warmth”, and taps perceptions of the supervisor as warm, friendly, and taking a genuine interest in the employee’s well-being. All three factors were fully consistent with the emphasis placed by childhood attachment theorists on the importance of parental caregiving that is characterised by warmth, sensitivity, responsiveness and the facilitation of autonomy.

While the factors appeared logical from a theoretical perspective, it was also important to consider the extent to which the factors were empirically related. According to Clark and Watson (1995), ‘creating valid subscales is an exceptionally tricky process’. Examining the correlations between subscales is a crucial step in deciding whether factors represent valid subscales (Tabachnick & Fidell, 1989; Clark & Watson, 1995). Looking at the correlations between subscales in the present study, Interpersonal Warmth correlated strongly with the main Sensitive-Responsiveness factor ($r = .77, p < .001$). This suggests that the two factors shared a substantial degree of variance between them, and hence the factors also overlapped in item content. This is unsurprising given that the items in both factors were intentionally written to tap the same theoretical construct of supervisor caregiving. Nevertheless, the size of the correlation indicated that retaining Interpersonal Warmth as a separate factor would add little to the prediction of outcomes. Based on this information, merging Interpersonal Warmth with the larger factor, Sensitive-Responsiveness, was warranted.

The correlation between Co-operation and Sensitive-Responsiveness was moderate ($r = .48, p < .001$), so the empirical case for merging these factors was also justified. In addition, the following issues were taken into account:

- One of the Co-operation items cross-loaded on to all three factors, loading only marginally higher on Co-operation. This may have undermined the validity and interpretability of the factor and suggests that the structure of the factor could be unstable/unreliable (Hair et al., 1998).

- On a practical note, the fact that the majority of the items were reverse-scored rendered using and interpreting relationships between the subscale and other variables potentially confusing.

These issues, combined with the moderate correlation with the main factor, justified integrating the Co-operation items with the rest of the scale. The reliability of the scale was not adversely affected by treating all items as a single scale. Cronbach's alpha for the integrated scale was .94.

Table 6.4: *Supervisor Caregiving Scale: Study 2 Factor Loadings*

| Scale Items | Factor | | |
|--|------------|------------|------------|
| | 1 | 2 | 3 |
| Whenever possible, my supervisor provides support without delay (7) | .97 | -.21 | -.07 |
| My supervisor is good at seeing things from my perspective (15) | .77 | .06 | .08 |
| My supervisor accurately perceives my needs and concerns (8) | .74 | -.08 | .23 |
| If I have a problem my supervisor is there for me (16) | .70 | .13 | .07 |
| My supervisor promptly acknowledges my concerns, even if s/he is unable to help me straight away (14) | .70 | .03 | .15 |
| My supervisor is happy to sit and listen if ever I have any worries (9) | .66 | .18 | .00 |
| My supervisor acts swiftly on his/her word (18) | .64 | .03 | .05 |
| My supervisor deals with my concerns in a suitable manner (3) | .61 | .24 | -.06 |
| My supervisor keeps up to date with my needs and concerns (12) | .54 | .07 | .36 |
| My supervisor understands my feelings (20) | .47 | .12 | .44 |
| My supervisor's behaviour towards me is sensitive (11) | .40 | .20 | .23 |
| My supervisor and I work together to identify solutions to my problems (5) | .38 | .10 | .31 |
| My supervisor tries to impose his/her opinions on me when we discuss solutions to my problems R (10) | -.11 | .64 | .02 |
| In response to my concerns about work, my supervisor follows his/her own agenda, ignoring my views of how to proceed R (19) | .16 | .61 | .04 |
| My supervisor accepts me no matter what I say or do (2) | .05 | .53 | .13 |
| My supervisor seems irritable or impatient with me R (4) | .37 | .48 | -.42 |
| My supervisor notices when I'm feeling down or stressed (6) | .21 | -.02 | .68 |
| My supervisor shows an interest in my well being (1) | .20 | .15 | .62 |
| My supervisor remembers personal information about me (17) | .20 | .19 | .53 |
| My supervisor is warm and friendly with me (13) | .18 | .43 | .45 |

Note: Highest factor loading is shown in bold; Item number is in brackets; R denotes reverse-scored item.

3.2.2 Relationship Between Supervisor Caregiving and Other Study Variables

Table 6.5 shows the means, standard deviations, and reliability coefficients for all variables. Table 6.6 shows the correlations of LMX, specific attachment to supervisor, and supervisor's caregiving style with the supervisor caregiving scale. The correlations for the three subscales, as well as supervisor caregiving as a single scale, are given in support of the case for merging the factors. Note that, compared with the subscales, supervisor caregiving as a single scale has the highest correlations with the other study variables. This confirms that the measure is more powerful as a single scale. In the light of this evidence, and given that a key focus of the present study was comparing the results with those from Study 1 (also obtained using a single-score SCS), the remainder of the discussion centres around supervisor caregiving as a single scale.

Table 6.5: Means, standard deviations, and reliability coefficients for Study 2 variables

| | Mean | Std. Dev | Alpha |
|--------------------------|------|----------|-------|
| SC (integrated scale) | 5.23 | .92 | .94 |
| Sensitive-Responsiveness | 5.18 | 1.03 | .94 |
| Co-operation | 5.35 | .99 | .70 |
| Interpersonal Warmth | 5.23 | 1.13 | .84 |
| LMX ^a | 3.81 | .60 | .82 |
| Avoidance | 3.38 | 1.06 | .80 |
| Anxiety | 3.65 | .93 | .65 |
| Warm Style | 5.87 | 1.46 | - |
| Rejecting Style | 2.02 | 1.61 | - |
| Inconsistent Style | 2.97 | 1.88 | - |

Note: SC = Supervisor Caregiving; LMX = Leader Member Exchange

^aAll measures have a 7-point scale range except LMX, which has a 5-point scale range

3.2.2.1 SCS and LMX

The Pearson product moment correlation between the revised supervisor caregiving single scale and LMX was .82 ($p < .001$). Supervisor caregiving was again regressed on to LMX to determine how much variance is unique to supervisor caregiving. The adjusted R square in this case was .67, indicating that approximately one third of the variance is unique to supervisor caregiving. This is an improvement on the figure obtained in the first study, although it is not possible to ascertain whether this is due to the *in situ* nature of the second sample, or changes to the response format of the supervisor caregiving measure. Nevertheless, the data suggest that while supervisor caregiving is, as expected, closely related to the construct of relationship quality, it is by no means redundant with it.

Table 6.6: *Correlation of Study 2 variables with Supervisor Caregiving as a single scale and as subscales*

| | Supervisor Caregiving | | | |
|--------------------|-----------------------|--------------------------|--------------|----------------------|
| | Single Scale | Sensitive-Responsiveness | Co-operation | Interpersonal Warmth |
| LMX | .82*** | .82*** | .46*** | .68*** |
| Avoidance | -.62*** | -.61*** | -.43*** | -.49*** |
| Anxiety | -.17* | -.16* | -.18* | -.10 |
| Warm Style | .84*** | .82*** | .49*** | .72*** |
| Rejecting Style | -.74*** | -.73*** | -.44*** | -.63*** |
| Inconsistent Style | -.58*** | -.55*** | -.48*** | -.48*** |

Note: * $p < .05$ *** $p < .001$

3.2.2.2 SCS and Supervisor-Specific Attachment Working Models

In order to test the hypothesis that attachment working models develop in the context of specific important relationships, and will vary according to the degree of caregiving that is encountered in a given relationship, supervisor caregiving was correlated with a measure of attachment to supervisor. Table 6.6 shows that there was a strong, negative association between supervisor caregiving and specific avoidance ($r = -.62$, $p < .001$), and a smaller negative correlation with specific anxiety ($r = -.17$, $p < .05$). These findings are in line with the predictions throughout. The smaller correlation between supervisor caregiving and specific anxiety corresponds to the theoretical prediction that anxious attachment develops as a result of inconsistent caregiver behaviour. That is, anxious attachment to one's supervisor may be associated with a supervisor who is either behaviourally inconsistent, or only performs some of the behaviours on the scale with any regularity. The stronger association between specific avoidance and supervisor caregiving suggests that avoidant working models may develop under conditions where the employee perceives the supervisor consistently failing to be warm, available and responsive in times of need.

3.2.2.3 SCS and Categorical Supervisor Caregiving Style

As a further test of construct validity, supervisor caregiving was correlated with the adapted categorical measure of supervisor's caregiving style (see p. 117). It was expected that there would be a strong relationship between scale scores on supervisor caregiving, and category ratings of caregiving style, since both measures are derived from the same principles of attachment theory. The findings supported the prediction. As can be seen in Table 6.6, the largest correlation was between supervisor caregiving and the warm, responsive style of

caregiving ($r = .84, p < .001$). The rejecting supervisory style was strongly and negatively associated with supervisor caregiving ($r = -.74, p < .001$). Finally, the supervisor caregiving scale was also negatively correlated with the inconsistent supervisor caregiving style ($r = -.58, p < .001$). Although an adapted scale was used here, the results broadly support the conclusion that the revised supervisor caregiving scale captures the key aspects of supervisor behaviour that are central to an attachment theory conceptualisation of supervisor caregiving.

4. Discussion

The overall aim of this stage of the research was to develop a measure of supervisor caregiving that would enable further testing of an attachment theory model of employee-supervisor working relationships and emotions at work. Study 1 was designed to generate and reduce a pool of items for inclusion in the scale, and to gather preliminary information about the measure's psychometric properties. The goal of Study 2 was to replicate and extend the findings from Study 1 using a revised scale and a different sample. Both studies showed that the measure had very good internal reliability. The validity of the scale was supported by correlations in the predicted directions between supervisor caregiving and all theoretically related and unrelated variables used in the study.

4.1 SCS and LMX

Although supervisor caregiving overlapped somewhat with the construct of relationship quality, as measured by LMX, it was not redundant with it. Around a third of the variance in supervisor caregiving could not be accounted for by LMX. This substantial amount of unique variance indicates that supervisor caregiving involves behaviours that are not encapsulated by the LMX construct. Indeed, conceptually, the constructs differ in several respects. For instance, LMX is characterised as a two-way process involving mutual obligation (Graen & Uhl-Bien, 1995). Conversely, supervisor caregiving is one-way - concerned only with employees' perceptions of the caregiving they receive from their supervisors. Moreover, LMX does not address issues such as emotional accessibility, or the timeliness and sensitivity of supervisors' behaviours. In line with Arnold et al. (2000), it is argued that the very high correlation between the two measures serves as evidence that all ratings of supervisor behaviour, including supervisor caregiving, may be subject to a halo effect. Furthermore, in Study 1, the halo effect may have been exacerbated by recall bias.

4.2 SCS Factor Structure

The factor structure of supervisor caregiving differed between the studies, with a two-factor structure being found in the first study and three factors in the second study. There could be methodological reasons for this finding. Firstly, participants in the Study 1 were not involved in employee-supervisor relationships when they completed the questionnaire. The need to rate items retrospectively may have led to selective recall bias and/or a tendency to answer items in a more logically consistent way. More specifically, the details and subtleties of their supervisors' behaviours were no longer current and perhaps, therefore, not easily accessible. Consequently, supervisors may have been rated according to a general impression that they had been 'good' or 'bad' managers. In contrast, study 2 participants should have been able to access memories of particular, and recent, experiences in their supervisory relationships. This could have resulted in a more fine-grained analysis of supervisors' behaviours, and hence a more sophisticated factor structure.

A second possibility is that the different factor structures were due to the use of different response anchors in each study. Study 1 used an *agree-disagree* Likert-style format. Study 2 asked respondents to make frequency ratings of behaviours on a 7-point scale ranging from *never* to *always*. The two types of response format alter the meaning of the measure. As a result, the two versions of the scale cannot necessarily be expected to yield identical factor structures.

It should be noted, however, that after merging the highly correlated Interpersonal Warmth and Sensitive-Responsiveness factors in Study 2, the remaining two-factor structure was very similar to the structure found in Study 1. Indeed, only one item differed between the two solutions. Thus, the differences in the results of the two studies may actually be quite superficial. From this perspective, both studies provided an indication that the supervisor caregiving construct is approaching uni-dimensionality. Only further research can shed light on whether the small additional factor loaded separately because it is conceptually differentiated, or simply because the items are reverse-scored (Kline, 2000).

It is notable that, despite efforts to write reverse-scored items for inclusion in the scale, the tests of content validity and factor analysis led to all but three being dropped from the solution. Ideally the scale would have been balanced with half the items being positively

worded and half negatively worded to prevent response bias (Kline, 2000). The fact the finalised scale is largely positively worded could lead to a tendency for respondents to agree with all statements regardless of their content. However, this effect may have been reduced to some degree by evenly interspersing the three reverse-scored items among the other items in the scale.

4.3 Theoretical Implications

Beyond establishing the psychometric properties of the supervisor caregiving scale, the results of this research support recent developments in attachment theory, and offer promising preliminary evidence congruent with the proposed attachment theory model of employee-supervisor relationships. Consistent with previous findings indicating that individuals hold multiple, specific working models for different social relationships (e.g Cook, 2000; Pierce & Lydon, 2001), Study 1 showed that global attachment models were not associated with perceptions of supervisor caregiving. This suggests employees' beliefs and expectations about relationships in general did not influence, and were not shaped by, working relationships with their supervisors.

Additionally, Study 2 found that supervisor-specific models of attachment were negatively and significantly correlated with supervisor caregiving. This is consistent with the proposal that individuals form specific relational models in the context of particular interpersonal relationships. More research is needed to investigate whether there is any overlap between global working models and supervisor-specific models, because the present studies did not measure both constructs simultaneously. Nevertheless, together these results can be interpreted as supporting the notion that attachment operates as both an individual difference variable (represented by the global working model) and a relationship variable (represented by the specific working model) (Pierce & Lydon, 2001). This in turn provides preliminary support for the roles of specific and global attachment working models that are proposed by the theoretical framework guiding this programme of research.

Also core to the theoretical model, supervisor caregiving was found to correlate strongly with the reported frequency of positive and negative emotions in employee-supervisor relationships (Study 1). Caution is necessary when interpreting the strength of these correlations because respondents were asked to give only overall estimates, retrospectively,

rather than report particular emotional reactions arising from specific events. This may again have led respondents to generalise their experiences based on whether they had a generally good or poor working relationship with their supervisor. Consequently, the observed correlations may have been inflated by both recall bias and a positive or negative 'halo' effect. Such effects are common whenever people are asked to rate a target individual on multiple dimensions (Fiscaro, 1988). Nevertheless, the results provide a preliminary indication that supervisor caregiving may be useful in helping to explain employees' experiences of negative emotions in supervisory relationships.

4.4 Caveats and Limitations

The research methodology reported here is not without its limitations, and these should be taken into account when interpreting the results. As already noted, the nature of the sample may have influenced the factor structure of the scale. In addition, it should be noted that in both studies, the ratio of cases to variables was below the level (between 10:1 and 20:1) usually cited as desirable for factor analysis (Bryman & Cramer, 1997; Kline, 2000; Tabachnick & Fidell, 1989). From sample sizes of less than 200 in each study, it is not possible at this stage to draw firm conclusions about the dimensionality of the supervisor caregiving scale.

Ideally, supervisor caregiving data would have been gathered on two separate occasions from the second sample in order to establish the degree of test-retest reliability of the scale. It is important to know how stable employees' perceptions of supervisor caregiving are over time if one is to be truly confident about reliability of the scale (Kline, 2000; Robson, 1993). In addition, it would have been preferable to test the validity of the scale against a broader range of existing measures. This would provide a fuller empirical picture of exactly what the construct 'is and is not' (Clark & Watson, 1995). However, given the time and resource constraints inherent in doctoral research, it was not possible to conduct research on such a scale. The purpose of the studies described here was simply to conduct research that was sufficient in scope to demonstrate the adequacy of the scale for subsequent use in the hypothesis-testing phase of the research.

5. Summary

In Stage 1 of the research two studies were conducted in order to develop a psychometrically robust measure of employee perceptions of supervisor caregiving. Conclusions about the number and nature of dimensions of supervisor caregiving must remain tentative until further research, using a larger and concurrently employed sample, is conducted (e.g. in Stage 2). In the meantime, these studies have shown that the measure works well as a single-score scale, both in terms of its internal reliability and conceptual coherence. On the basis of these findings, it was decided to proceed to the next stage of the research with the supervisor caregiving scale in its existing format. It was intended that the factor structure could then be further investigated using the Stage 2 data, and confirmatory factor analysis.

Chapter 7: Survey Method

This chapter describes the methods involved in conducting Study 3, the questionnaire survey. The chapter begins by recapping the aims and research questions of the study. The context of the research is then described, detailing the research site and its organisational culture. This is followed by a summary of the sampling criteria and characteristics of the sample. Next the procedure for the study is presented. This includes details of access negotiation and survey administration. The final section provides information about the measures, and the results of further work with the supervisor caregiving scale (confirmatory factor analysis).

1. Aims and Research Questions

1.1 Aims

Studies 1 and 2 were designed to develop a measure of supervisor caregiving so that further testing of the proposed theory could be undertaken. The objective of this preliminary phase of the research was achieved. The resulting 20-item measure demonstrated good internal reliability and validity when treated as a uni-dimensional scale. The present study followed directly from the previous stage of the research and had two main aims:

1. To replicate the earlier findings that supervisor caregiving is significantly associated with both avoidant and anxious specific working models.
2. To investigate the effects of supervisor caregiving and attachment working models (specific and global) on employees' cognitive and emotional reactions in their supervisory relationships.

1.2 Research Questions

The aims were operationalised as the five research questions listed below. The first question pertains to the first research aim. Subsequent questions were designed to address the second aim. More specifically, questions 1 to 4 investigated the core assumptions underlying an attachment theory perspective of employee negative emotions in supervisory relationships. The fifth question concerned the comparison between the Independent Effects and Interaction models described in Chapter 4:

1. Does supervisor caregiving predict relationship-specific attachment working models?
2. To what extent are specific and global attachment working models related constructs?
3. Do specific working models predict negative interpretation of events and negative emotional reactions?
4. What are the relative contributions of specific and global working models to the prediction of negative event interpretation and negative emotional reactions?
5. Are the relationships underlying the associations between supervisor caregiving, attachment working models (specific and global), event interpretation, and negative emotional reactions best described by an 'Independent Effects Model' (Ch 4, Figure 4.1) or by an 'Interaction Model' (Ch 4, Figure 4.2)?

2. Research Context

The current study took place in an acute services NHS Trust located in the West Midlands region of the United Kingdom. At the time of the research, the Trust had 934 beds and employed 4419 staff (source: Binley's, 2001). The Trust comprised two separate hospital sites - the result of a merger when the Trust was formed in 1995. The larger of the two hospitals, Site 1, was originally a university hospital, while the second site, Site 2, began life as one of the city's workhouses in the nineteenth century. The merging of the two hospitals saw them united under the banner of a 'University Hospital Trust'. Despite these changes, it was apparent that there lingered among some staff and patients a sense of the institution's history. For example, one contact at Site 2 told the researcher that staff occasionally felt 'looked down upon' by their Site 1 colleagues who had always worked at the 'posh' hospital.

Retention of nursing staff was a key issue in the NHS at the time of the research. The research organisation was no exception. Turnover among nurses in the Trust was 13% during the research period, and was described as a 'major problem'. The Trust believed it had extra difficulty retaining nurses because there were numerous other hospitals in the city and the region. This proximity of alternative workplaces, combined with the constant availability of posts in other Trusts, made it easy for nurses to change jobs if they became dissatisfied.

Relative to other NHS Trusts, the research setting had quite a traditional 'us and them' (the 'workers' versus the 'management') culture, with a strong and active Staff Side (union representation). According to the main contact for the research, this stemmed from the merger

and a series of unpopular changes introduced by successive Chief Executives. Approximately six months prior to the researcher negotiating access for the research, there had been a shake-up of the Trust Board membership, involving several new appointments. This provided an opportunity to change the existing culture. A new Chief Executive (CE) was first appointed to lead the organisational change process. He personally oversaw the recruitment of a new Head of HR and Director of Nursing.

The CE tried to ensure that the new Board members shared his values. In particular, the new CE brought with him a commitment to a more 'open' and 'inclusive' style of leadership than had been hitherto experienced by the Trust. He was especially keen that all staff, at any level within the organisation, felt valued and able to influence the issues that affected them. Symbolic of the new culture envisaged by the CE was the 'Hotline to (CE's first name)' initiative. This was basically an answering system that enabled staff to phone and leave messages about their concerns on the understanding that the CE himself would listen to the issues raised.

In sum, the new CE was attempting to change the organisational culture, with an emphasis on increasing openness of communication and staff involvement. At the time of the research, initiatives designed to establish and promote the new culture were in their infancy, and the organisation was therefore in a state of transition. Given the focus of the current research on the impacts of supervisory (i.e. management) behaviours on employees' psychological experiences of work, it is important to bear this contextual information in mind when interpreting the findings.

3. Sample

3.1 Sample Selection

Nurses were selected as the sample population for the survey. Nurses work under conditions of high stress, rapid change, and relatively low pay (RCN website, 2001). Research on social support has shown that leaders play a key role in reducing employee stress and enhancing well-being (Cohen & Wills, 1985; Dormann & Zapf, 1999). Hence, it was anticipated that the stressful hospital environment should render the supervisory relationship, and quality of supervisor caregiving, extremely important for nurses. This heightened role

significance should make the development of attachment working models more likely. Moreover, activation of attachment working models is more pronounced under stressful conditions, when the presence or absence of sensitive and responsive caregiving is most keenly felt (Feeney, 1999). Therefore, it was anticipated that, with the present sample, the effects predicted by the research model(s) would be more likely to be observed. This was an important consideration, given that the present research is exploratory.

The study required that each nurse had a single supervisor/manager, with whom they had fairly regular contact. The rationale underpinning this sampling frame was that, based on the literature review, these conditions are necessary in order for relationship salience and role significance to be present in employee-supervisor relationships. Applying the criterion led to a sample population of E and F grade Registered Nurses (RNs) who worked in wards, and F and G grade RNs working in ITUs (Intensive Treatment Units). Nurses working in other departments, for example Accident and Emergency, and Theatres, were excluded from the sample pool because they worked in multiple teams and therefore might not recognise a single individual as their supervisor or manager. E grade RNs were not sampled from ITUs. The ITUs were larger than the standard wards and usually headed by a more senior, H grade, manager. Consequently, E grades reported to one or more F grade supervisors and had little contact with their unit manager. In ITUs, it was therefore only nurses of F and G grades who fitted the selection criteria. Ward and ITU nurses employed in grades D or below were not sampled because they comprised student, overseas, and auxiliary nurses – all of whom tended to be moved every two to three months between wards (and therefore supervisors) depending on demand, or as a way of gaining experience. Moreover, they were usually supervised by various E or F grades, rather than by the ward manager.

Thus, the sample population was made up of RNs employed in work units that had unambiguous line management structure. Specifically, all the selected nurses recognised the ward manager as their main manager or supervisor. Note that within the chosen sample pool, some nurses, especially E grades, might receive day-to-day clinical supervision (e.g. of tasks) from other senior nurses (e.g. an F grade). Nevertheless, it was to the ward manager that they would turn if they needed to discuss more serious work or personal problems. Thus it was the ward manager who had the primary supervisor caregiving role. In addition, ward managers were responsible for staff appraisals, giving consent for attendance on training courses, signing off leave (annual and compassionate), and absenteeism management. In line with

literature reviewed earlier, it was anticipated that this type of role structure would imbue nurse-ward manager working relationships with clear salience and role significance. In turn, this should provide a good basis for the development and operation of attachment working models.

3.2 Sample Characteristics

Five hundred and sixty questionnaires were mailed to E and F grade nurses working on wards and, F and G grade nurses working on ITUs. One hundred and eighty three nurses employed in 48 different work units returned questionnaires, yielding an overall response rate of 33%. This figure is equivalent to the average response rate for postal surveys generally (Robson, 1993). Of the 183 respondents, 94% were female and 6% were male. 83% of the sample was White, 4% Black-African, 5% Black-Caribbean, 1% Chinese, 2% Indian, and 3% were of 'other' ethnic origin. The mean age of respondents was 36.6 years. Fifty nine per cent of nurses worked at Site 1 and 41% worked at Site 2. These percentages were proportional to the relative sizes of the two sites. The average length of time that the nurses had been working for the Trust was 9.8 years, and the average time in post was 4.5 years. 70% of nurses worked full-time, with the remainder working between 8 and 30 hours part-time. The proportions of questionnaires returned by E, F, and G grades were 57%, 33% and 10% respectively. Wards varied considerably in size (range = 2 to 30), as did the number of questionnaires returned by nurses in each ward (range = 2 to 11). (Note that the number of questionnaires sent to each ward was taken as a proxy for ward size, since questionnaires were only dispatched to E grades and above. Effectively, the number of nurses at each grade was a good indication of ward size given the relatively standardised role structure in the research organisation).

Supervisors

Ninety two per cent of the sample had female ward managers, and 8% had male ward managers. The length of time for which individual nurse-supervisor working relationships had been established ranged from 1 month to 18 years, with a mean duration of 2.6 years at the time of the survey.

4. Procedure

This section presents information regarding the process of arranging and conducting the survey. Before describing how the survey was conducted, access negotiation, planning and preparation, and the delays encountered prior to implementing the research are discussed in detail. This detail is important to include because it illustrates:

- The emphasis placed by the 'new regime' on consultation and communication throughout the organisation
- The relative power and hostile attitudes of the unions
- The fact that the questionnaire and conduct of the survey were shaped to an extent by the concerns and wishes of the organisation

Essentially, this information provides further evidence of the context in which the research was conducted, which may be important to consider when interpreting the results. Furthermore, these issues, in conjunction with the fact that the research was repeatedly delayed, may have prevented a higher response rate.

4.1 Negotiating Access

A prior link existed between the researcher's institution (ABS) and the Trust. The Trust had invited a research team at ABS to collaborate in tendering for research funding for an initiative that was unrelated to the present study. Ultimately the collaboration did not proceed. However, both the Trust and the research team wished to maintain their association. The ABS team leader therefore suggested the present research to the Trust. Subsequently, at an initial meeting in April 2001, the researcher and ABS team leader met with the Director of HR, and the Management Development Adviser for the Trust.

At the meeting, the researcher presented a proposal for the research (see appendix 7). Care was taken to pitch the proposal at a level that was tangible and relevant to issues facing the organisation, in particular nurse turnover. Hence, the proposal was described as investigating the potential link between 'quality of nurse-ward manager relationships' and 'stress, job satisfaction, and turnover' in nurses. It was emphasised the Trust would benefit from the research by: a) gaining valuable insight in to the impact of working relationship quality on important employee and organisational outcomes; and b) gaining access to the knowledge and tools that would enable future interventions to maximise working relationship

effectiveness, and reduce negative employee and organisational outcomes. Both representatives from the Trust were enthusiastic about the research. The Director of HR gave a 'provisional green light' to go ahead with the research but needed to consult with other members of the Trust Board, especially the Director of Nursing. He indicated that he would be in touch again within a fortnight.

Following the meeting, the researcher e-mailed the HR Director to summarise the actions agreed at the meeting. During the next six weeks, the researcher received no reply either to the e-mail, nor to the two subsequent phone messages and further e-mails that were sent as reminders. Finally, the Management Development Adviser (MDA, present at the initial meeting) e-mailed the researcher apologising for the delay. She explained that the HR Director had left the organisation and she would henceforth be the main organisational contact for the research. She added that the delay had been further prolonged by the fact that the Director of Nursing had only just joined the Trust and had needed time to 'settle in' before the MDA consulted with her about the research. The MDA requested an electronic copy of the proposal so that she could forward it to the Director of Nursing. It was intended that they would discuss the research at a forthcoming meeting, and the MDA would contact the researcher subsequently. In due course the MDA announced that the Director of Nursing was interested in the research proposal and both she and the MDA wished to meet the researcher to discuss it further. It was a month later (July 2001) before the meeting took place because the Director of Nursing and MDA were both extremely busy and so found it difficult to co-ordinate diaries.

At the July meeting, the Director of Nursing had only fifteen minutes to spare before going to her next meeting. Discussed at lightening speed, therefore, were the aims and benefits of the research, the timescale, who would be sampled, and ethical issues. The latter point covered the need to guarantee anonymity for respondents, and to provide contact details for assistance should any extreme situations come to light during the interview phase of the research (see chapter 6). It was agreed that Registered Nurses working in wards and ITUs would be the most appropriate group to research because they have the clearest line management structure compared with other groups (i.e. Professions Allied to Medicine, A&E, and Theatres). Overall, the Director of Nursing was satisfied with the proposal. She stated that she was very interested in the research because it was congruent with the more open, participative culture that they (the Trust Board) were trying to promote. She believed that the

research would help to reinforce the message that the organisation valued nurses and their welfare.

At the conclusion of the meeting, permission was granted to proceed with the research. All that remained was to raise awareness of the research among senior nurses, and to notify the Staff Side representatives (from UNISON and RCN unions). The Director of Nursing and MDA volunteered to undertake these matters themselves, and the researcher offered to meet with any further Trust members as necessary. It was established that the MDA would be the researcher's main organisational contact, and the Director of Nursing was the ultimate client for whom the research report would be written at the end of the process.

4.2 Planning and Preparation

Following confirmation of access, the researcher met with the MDA to discuss the content of the questionnaire, and details of administering the survey. The date set for the survey was the first week of September 2001. The reason for not administering the survey sooner was that the response rate might have been adversely affected by nurses taking annual leave over the peak summer holiday period. It was established that most efficient means of administering the survey was via the Trust's internal mail system. To this end, the MDA arranged for the researcher to meet the HR Systems Analyst a few weeks later. The Systems Analyst provided the researcher with an excel file containing the names and internal addresses of all nurses (of the specified grades) working in wards and ITUs.

At the same meeting, the researcher talked through the questionnaire with the MDA and invited her comments and suggestions. Extra copies of the questionnaire were also left with the MDA so that she could consult with senior nurses, and the Director of Nursing, and feed back their comments to the researcher. In addition to general comments, the researcher requested that the MDA solicit specific feedback concerning the perceived relevance of the scenarios of supervisor behaviours that had been developed for the survey.

Two weeks later, the MDA contacted the researcher with feedback about the questionnaire. Overall, the Director of Nursing and other Heads of Nursing were happy with all items and measures and believed the scenarios to be fully applicable to the target population, with the proviso that the term 'appraisal' was substituted for 'a regular meeting to

discuss performance'. This was because some wards had not yet formalised their appraisal procedures. Other comments led to the inclusion of extra background questions to collect information about grade, and whether the respondent had taken a career break. Finally, the survey instructions were modified in order to make it clear that 'supervisor' referred to respondents' ward managers. In the light of this feedback, a final version of the questionnaire was drafted and then sent to the university reprographics department for copying.

With the questionnaire printed and the sample database prepared, the researcher wrote a covering letter for the survey. The MDA and Director of Nursing also contributed to drafting the letter. The researcher provided the initial draft. It included a brief explanation of the survey and stressed that the strictest confidentiality would be maintained. The MDA and Director of Nursing wrote contextual information regarding how the research fitted in with ongoing Trust initiatives. The final letter was given approval by the Director of Nursing and Heads of Nursing.

4.3 Delays

The survey did not go ahead in the first week of September 2001 as planned. There were two key factors that held the survey back: other organisational surveys, and the concerns of unions.

Other Surveys – Shortly before the planned date for the survey, it transpired that the research would clash with a major survey on Back Injury by the HSE. The MDA advised that, in order to maximise the response rate for both surveys, it would be better to wait until two weeks after the HSE survey before sending out the questionnaire for the current study. The date of the HSE survey then proceeded to slip week by week, but the MDA still advised waiting because, by this time (late October), the Trust's annual staff opinion survey was also about to be sent out. It was desirable to avoid overloading the target sample of nurses with questionnaires. Therefore a new date was set for 5th November 2001.

The Unions – In July, the researcher was given assurances that notifying the union representatives would be a mere formality, and the Director of Nursing would speak to them about the matter. The researcher attempted to follow-up on whether Staff Side were aware of the research on several occasions between July and the end of October 2001. Each time, the

reply was that the research had not made it on to the agenda because the unions were ‘caught up in other issues that were occupying a lot of their time’. (One of these issues involved the planned ‘reconfiguration’ of medical services at one of the Trust sites. The restructuring programme would entail redeploying staff, and possible redundancies).

Three days before the 5th November survey date, the MDA contacted the researcher with the news that Staff Side had still not been consulted about the research, and the Director of Nursing did not wish the survey to proceed without their consent. In the light of this situation, the survey was postponed again. Two weeks later, the researcher met the UNISON representative and the RCN representative. Also present, as a facilitator, was the deputy Head of HR. The representatives were divided in their opinions about the research. One representative was enthusiastic. She thought the survey was a positive step because it was very relevant to nurses’ experiences and showed that the Trust was taking an interest in employees’ feelings. In contrast, the other representative was deeply suspicious about the timing of the survey, and why their Trust had been selected as the research site. The researcher assured the representative that there was no hidden agenda, and that the research was completely independent of the organisation. Both representatives were also very concerned about confidentiality for participants, especially regarding the use of results. The researcher assured the representatives that, as a psychologist, she adhered to the highest standards of ethical conduct in research, as set down by the British Psychological Society. Therefore, it would not be possible to identify any individual, supervisor, or work unit from the report because all reported findings would be aggregated and anonymised. At the close of the meeting, one representative was happy for the survey to go ahead; the other said she must consult some colleagues before making a decision. Three days later the reluctant representative consented to the survey, providing that Staff Side received copies of the feedback report and were involved in deciding any action points based on the recommendations. The Director of Nursing approved this course of action, and the date for the survey was set for 26 November 2001.

4.4 The Survey

The survey was administered via the Trusts’ internal mail system. The materials for the survey were packed and sorted according to work unit by the researcher, at ABS. The researcher then delivered the questionnaires to the MDA’s office at Site 2 where they were

taken to the post room for distribution. All nurses in the sample population were sent a questionnaire with a covering letter and a reply-paid envelope for the return of completed questionnaires (see appendices 8 and 9 for copies of the letter and questionnaire). The covering letter described the purpose of the research, assured confidentiality, and asked for the return of questionnaires within three weeks of receipt of the package. Full instructions for completing the questionnaire were given on the front cover of the questionnaire booklet. Every nurse in the sample pool was assigned an identification number. This was written on the back of each questionnaire. The system was designed to enable identification of nurses who returned questionnaires (and from which ward), so that they could be invited to take part in the next phase of the research. The covering letter explained that the number did not affect confidentiality of the survey and was solely for use by the researcher. The questionnaire took approximately 20 minutes to complete.

Two weeks after mailing the questionnaires, letters were sent through internal post to thank all who had so far participated, and to remind anyone who had not yet returned their questionnaires of the deadline date. (A copy of the letter can be found in appendix 10.) By the deadline date, 146 questionnaires had been returned. It was noticeable that hardly any questionnaires had been received from 12 wards in one of the Trust sites. According to the MDA there had been problems with the internal post at this site, and these wards were among those affected by the difficulties. Consequently, permission was given to immediately re-send the survey to the 12 outstanding wards. The extra questionnaires were therefore sent out in mid-December. An additional 37 questionnaires were returned following the re-send.

5. Measures

The questionnaire booklet designed for the survey contained measures chosen to test the research model, plus three measures that were included solely for information for the host organisation. Participants were asked to provide background information and complete the measures of supervisor caregiving, specific attachment, and global attachment that were used in Study 1 and/or Study 2 (see chapter 6 for a description of these measures). Core to the research model, the booklet contained a relationship events battery that was developed to elicit interpretation of, and emotional reactions to, hypothetical supervisor behaviours. Finally, for the Trust, measures of job satisfaction, well-being and turnover intentions were

included. This information was collected because it formed the basis of the proposal used to negotiate access to the organisation. Given that the measures were not for use in the present research they are not described here, and the data are not discussed in this thesis.

Background Details

Participants were asked to provide background information about themselves in the following areas: age, gender, ethnic background, grade, organisational tenure, job tenure, length of supervision relationship, supervisor's gender, type of contract (full- or part-time), and whether a career break had been taken.

Relationship Events Battery

Based on an approach used by Collins (1996) to investigate cognitive and emotional reactions in romantic relationships, the relationship events battery for this study consisted of the following elements: hypothetical relationship event scenarios (the stimuli); a measure of negative emotional reactions; and a measure of relationship event interpretation.

Relationship Event Scenarios

Participants were presented with two negative scenarios, each depicting a hypothetical event that might occur between an employee and their supervisor. The advantage of using a hypothetical approach is that it enables comparison of working model differences in reactions to *the same* events (Collins, 1996). That is, one can be more confident that any relationships found are attributable to differences in working models. The scenarios used are shown below in figure 7.1. In brief, the scenarios were: Your supervisor a) says s/he cannot help you with a work issue at a time when you request urgent assistance; and b) is indifferent when you confide in him/her about your work-related emotional distress. These were designed to tap attachment-relevant themes of supervisors' warmth, responsiveness and availability (emotional and physical). Effectively, therefore, the scenarios were examples of poor supervisor caregiving behaviours. Positive events were not included because they are less likely to stimulate attributions (Weiner, 1985; 1986). In contrast, events that are relatively negative and ambiguous to the recipient are more likely to elicit causal reasoning (Hastie, 1984). The applicability of the scenarios to the work experiences of the target population was checked using local knowledge in the research organisation.

Each scenario was placed on a separate page in the questionnaire booklet. Above the first scenario participants read the following statement: *'Working relationships between employees and supervisors can be a source of both good and bad feelings. The following questions ask about what you would think and feel if your supervisor behaved towards you in the ways described here. Imagine your supervisor performing each of the behaviours below. Indicate how you think you would react if the event happened to you today.'* Participants were then asked to indicate how they would respond by completing a measure of emotional reactions and a measure of event interpretation for each scenario in turn.

Figure 7.1 *Hypothetical Relationship Event Scenarios*

EVENT A

You need to speak to your supervisor about an urgent work matter. The problem cannot be resolved without first consulting your supervisor. You approach your supervisor, and say that you really need his/her opinion on a problem that's cropped up. Your supervisor says s/he cannot see you right now.

EVENT B

At one of your regular meetings with your supervisor, the two of you discuss your performance. During the past year, your work unit has often been short-staffed, leaving you (and your colleagues) with a very heavy workload. You tell your supervisor about the severe strain you have been experiencing, and the concerns you have about the effectiveness of the work unit under these difficult conditions. Your supervisor shrugs his/her shoulders and remarks that all departments are facing the same problem.

Negative Emotional Reactions

A measure was developed to assess the extent to which participants believed they would experience particular negative emotions in response to each scenario. Note that this is a different measure from that used in Study 1 to assess overall *frequency* of emotional experiences. The emotion terms for the new measure were selected according to the following criteria:

1. Previous research indicated that the emotions were relevant to the workplace (e.g. Basch & Fisher, 2000)
2. The emotions had been shown to differentiate people with different attachment styles (e.g. Collins, 1996; Fuendling, 1998; Mikulincer, 1998a; 1998b)

Nine negative emotions terms (hurt, guilty, annoyed, embarrassed, anxious/worried, ashamed, frustrated, angry, upset) were interspersed with five positive emotion terms (pleased, happy, grateful, glad, proud). The positive emotions were counterbalancing items intended to

discourage response bias. They were not pertinent to the research model and therefore were not analysed. Participants were asked, '*If my supervisor did this (the scenario) to me, I would feel:*'. They then rated the extent to which they believed they would 'feel' each of the positive and negative emotions on a 6-point scale. The scale ranged from 1 = *Not at all* to 6 = *Extremely*. A 6-point scale was chosen to be consistent with the response format for the pre-existing event interpretation measure. It also had the advantage that participants were forced to respond because there was no mid-point '*Not Sure*' / easy option. This is desirable when dealing with potentially sensitive topics (Kline, 2000).

A separate emotional reactions scale was completed for each scenario. Scores for individual negative emotions were then derived by averaging across the negative items on both measures. Principal axis factor analysis with oblique rotation revealed two factors (see appendix 11). The first factor contained emotions that were largely other-focused: annoyed, angry, hurt, frustrated, upset. This clustering is consistent with previous research indicating that hurt and anger emotions are often experienced together (Leary & Springer, 2001). It may also be that participants interpreted the terms 'hurt' and 'upset' according to their more colloquial meanings (i.e. 'hurt' as in being 'offended' by the perpetrator, and 'upset' as in a synonym of anger). Overall therefore, the factor was labelled 'Anger Emotions'. The second factor comprised emotion terms that are generally defined in the emotion literature as self-focused or self-conscious (e.g. Lazarus, 1991a, Lewis, 2000). The emotions were: guilty, embarrassed, anxious/worried, ashamed. This factor was labelled 'Distress Emotions'. The factors were moderately correlated ($r = .47, p < .001$). Cronbach's alpha for the anger emotions subscale was .91. Coefficient alpha for the distress emotions subscale was .75. Given the theoretical and internal consistency of the subscales, they were retained for use separately in subsequent analysis, as well as combined to give an overall 'Negative Emotions' score.

Relationship Event Interpretation

Participants' interpretations of the hypothetical relationship events were assessed using an adapted version of the Relationship Attribution Measure (RAM) developed by Fincham and Bradbury (1992). The original scale assesses different types of attribution that are relevant to personal relationships and has good reliability, with alphas exceeding .70 (Fincham & Bradbury, 1992). In addition, it is a short (6-item) measure with a simple format, making it ideal for inclusion in a battery that was bounded by space constraints. The wording

of the RAM scale was changed so that all items referred to 'my supervisor' instead of 'my partner'. Three items assessed different dimensions of causal attributions: a) locus – the extent to which the cause of the event rested with the supervisor; b) stability – the extent to which the cause of the event was likely to change; and c) globality – the extent to which the cause affected other areas of the working relationship. An example of a causal attribution item is '*The reason my supervisor behaved this way is not likely to change*' (stability). The three remaining items on the scale assessed different aspects of 'responsibility-blame' attributions. These attributions concern the extent to which intentionality, selfish motivation, and blameworthiness are ascribed to the perpetrator of the event. An example of a responsibility-blame attribution is '*My supervisor did this on purpose, rather than unintentionally*' (intent). For each scenario, participants were asked: '*If my supervisor behaved this way, it would be because...*'. Then they rated the extent to which they believed each of the attribution dimensions would apply to them using a 6-point scale. The scale was anchored by 1 = *Disagree Strongly* and 6 = *Agree Strongly*. Item scores were calculated by averaging across the two measures. Fincham and Bradbury (1992) found that the causal and responsibility-blame attributions formed two clear factors. In the present study, principal axis factoring revealed that all items loaded on a single factor (see appendix 11). This implies that treating the causal and responsibility-blame dimensions as separate sub-scales would not yield differential correlations with the dependent variables (Hair et al., 1998). Therefore it was decided to treat the items as a single composite scale labelled 'Event Interpretation'. Cronbach's alpha for the scale was .94.

5.1 Piloting the Relationship Events Battery

Because the Relationship Events Battery was newly developed for the study, steps were taken to ascertain the instrument's content validity (time constraints did not allow for a large-scale pilot study). First, an attachment theory practitioner-academic (Dr. Gillian Hardy) was consulted to check that the scenarios were attachment-relevant. In her view, the scenarios should activate respondents' attachment working models. As a further check, five organisational researchers were recruited to evaluate the instrument. The judges were asked to read each scenario and complete the interpretation and emotion scales. They were also asked to comment on conceptual and technical aspects of the battery including: the extent to which the scenarios reflected lack of warmth, sensitivity and availability; the formatting of scales and ease of completion; the wording of instructions and scales; and the

comprehensibility and applicability of the scenarios to work. The five judges gave verbal feedback and annotated the battery as they completed it. All judges considered the scenarios attachment- and workplace-relevant. The major criticism concerned the response format for the scales. In particular, the items were crowded so close together that it was difficult to ensure that the responses circled matched the correct statement. Thus, in order to reduce measurement error, the format was amended by increasing the line-spacing between items. Overall, an inspection of the five individuals' responses to the scales showed a good range for each scenario. Although only a very small sample, this nevertheless indicated the potential for a good spread of scores in the field research.

6. Supervisor Caregiving Scale: Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was performed on the supervisor caregiving data in order to clarify unresolved issues concerning the dimensionality of the scale. To recap, the results of the exploratory factor analysis (EFA) reported in the previous chapter indicated that supervisor caregiving loaded strongly on one large factor plus one, or perhaps two, smaller factors. It was concluded, on statistical grounds, that the construct would be more reliably represented if all 20 items were combined into a single dimension. The resulting scale demonstrated good internal reliability and validity. However, it was not possible to ascertain empirically whether the adopted single-factor model was in fact the 'best' model, or a good fit for the data, as has been assumed. CFA, on the other hand, can provide this information (Hair et al. 1998).

CFA is a form of factor analysis based on structural equation modelling. Unlike EFA, CFA allows the researcher to specify a priori which variables (items) will load on which factors. The researcher can also specify various different factor structures and compare them in order to establish which model provides the best fit for the data (Stevens, 1996). Thus, using CFA, it was possible to test how well the data in the present study fit a single factor model. Moreover it was possible to investigate whether the single-factor model was statistically 'better' than the alternative two-and three-factor models originally found by EFA in study 1 and 2.

The data were analysed using AMOS, a structural equation modelling package compatible with SPSS for Windows. Three models were specified:

1. The single-factor model
2. The two-factor model found in Study 1
3. The three-factor model found in Study 2

Turning first to the test of the single-factor structure, the factor loadings for the solution are shown in Table 7.1. The pattern of loadings was familiar, bearing a close resemblance to the two-factor structure of Study 1. Here, eighteen of the twenty items loaded highly on the specified factor, with values ranging from .67 to .92. The two items with noticeably smaller loadings (.37 and .49) were reverse-scored.

Table 7.1. *CFA of the Supervisor Caregiving Scale: Loadings for Single-Factor Model*

| Scale Items | Loading | Sig (CR) |
|--|---------|-------------|
| 1. My supervisor shows an interest in my well-being | .85 | - |
| 2. My supervisor accepts me no matter what I say or do | .67 | 10.57 |
| 3. My supervisor deals with my concerns in a suitable manner | .87 | 15.87 |
| 4. My supervisor seems irritable or impatient with me R | .49 | 7.06 |
| 5. My supervisor and I work together to identify solutions to my problems | .83 | 14.60 |
| 6. My supervisor notices when I am feeling down or stressed | .80 | 13.85 |
| 7. Whenever possible my supervisor provides support without delay | .92 | 17.83 |
| 8. My supervisor accurately perceives my needs and concerns | .90 | 16.99 |
| 9. My supervisor is happy to sit and listen if ever I have any worries | .88 | 16.50 |
| 10. My supervisor tries to impose his/her opinions on me when we discuss solutions to my problems R | .37 | 5.15 |
| 11. My supervisor's behaviour towards me is sensitive | .73 | 11.99 |
| 12. My supervisor keeps up to date with my needs and concerns | .87 | 15.96 |
| 13. My supervisor is warm and friendly with me | .83 | 14.83 |
| 14. My supervisor promptly acknowledges my concerns, even if s/he is unable to help me straight away | .90 | 16.99 |
| 15. My supervisor is good at seeing things from my perspective | .88 | 16.33 |
| 16. If I have a problem, my supervisor is there for me | .92 | 17.84 |
| 17. My supervisor acts swiftly on his/her word | .75 | 12.40 |
| 18. My supervisor remembers personal information about me | .81 | 13.91 |
| 19. In response to my concerns about work, my supervisor follows his/her own plans, ignoring my views of how to proceed R | .70 | 11.10 |
| 20. My supervisor understands my feelings | .90 | 17.12 |

This pattern suggests that if items 4 and 10 had been free to load on a second factor using EFA they might perhaps have done so. However, even the smallest CFA loadings were

significant, as indicated by the C.R. values (anything over 2.0 is significant, Stevens, 1996). Thus, overall the results indicate that, when 'forced', all twenty items can be significantly predicted by a single underlying dimension.

To find out whether this single-factor model is a 'good' model, and better than the alternative models, the fit indices for each of the three models were examined. Table 7.2 allows a comparison of the models. The requirement for good fit is that all the indices exceed .9 (Stevens, 1996). At first glance, the fit indices appear to suggest that there is no one best model since, according to the statistics, all provide a good fit to the data with only tiny differences between them.

Table 7.2. *Comparison of SCS factor structures: CFA fit indices*

| Model | CFI | NFI | TLI |
|---------------------|------|------|------|
| 1 factor | .971 | .958 | .964 |
| 2 factors (Study 1) | .973 | .959 | .966 |
| 3 factors (Study 2) | .973 | .960 | .966 |

However, as with EFA, correlations between factors need to be taken into account to get the complete picture. When the factor correlations in models 1 and 2 were examined it was evident that all models were not equally good. Even allowing for the inflation of correlation estimates inherent in CFA (Hair et al., 1998), the associations between all factors in both models were very strong. The two-factor model had a correlation of .81 between factors. In the three-factor model, the main Sensitive-Responsiveness factor correlated .9 with Co-operation, and .97 with Interpersonal Warmth. The correlation between Co-operation and Interpersonal Warmth was .84. This implies that the fit indices can be interpreted as showing that the relationships between items are sufficiently strong that any combination of three or more can be 'forced' to load significantly as a factor, however it may be specified.

On balance therefore, the single-factor model emerged as the best solution. All items loaded significantly on the factor, and the model had acceptable fit according to the various indices. These findings indicate that despite the fact that a few items may have shifting allegiances between samples, it is appropriate to consider supervisor caregiving as a uni-dimensional construct. The continued use of the measure as a single scale was therefore supported. The alpha coefficient for the scale in the present study was .97.

Having described the context of Study 3, and the procedures and materials used, the next chapter will present the analysis and results of the questionnaire survey.

Chapter 8: Survey Results and Discussion

This chapter presents the findings and results for the questionnaire survey (Study 3) that was designed to test the theory proposed in Chapter 4. First, the steps taken to prepare the data, and the preliminary statistical analyses, are described. In the next section, the analysis strategy is outlined. Following this, the results of the main quantitative analysis are reviewed. The chapter concludes with a summary and discussion of the findings.

1. Data Preparation and Preliminary Analysis

1.1 Sample Size and the Representativeness of Responses

The number of returned questionnaires was checked against the total expected from each ward (N.B. the latter is a proxy for 'ward size'). The aim was to establish whether the questionnaires received were proportionally representative of the wider sampling pool. Of particular concern was whether the wards from which only two questionnaires were received were generally smaller. If this were not the case, the reasons for an individual in a large ward completing the survey when almost all of her colleagues did not might be a source of bias that would be reflected in the individual's questionnaire responses. The correlation between questionnaires sent to, and received from, each ward was strong, $r = .68$ ($p < .001$). Thus the proportions of questionnaires received from each ward were largely representative of the respondents' ward size. It was concluded that, where only two questionnaires had been received from wards, the responses were unlikely to be biased and should therefore be retained for further analysis.

1.2 Screening the Data

Descriptive statistics were examined for all of the measured variables. The frequencies, means, standard deviations, range and skewness for each variable were reviewed in order to check for any abnormalities in the data. A few minor errors in data entry were detected and amended by this method. Visual inspection of histograms, with reference to the descriptive statistics for each scaled variable, provided information about outliers and normality of distribution. No extreme outliers were observed (i.e. scores did not exceed four standard

deviations from the mean, Hair et al., 1998). The majority of variables were slightly positively skewed. The supervisor caregiving and anger emotions scales were slightly negatively skewed. No further steps were taken with these variables because Tabachnick and Fidell (1989) warn that applying transformations to data that is only slightly skewed can result in skewness in the opposite direction.

However, the distress emotions subscale had a noticeably larger positive skew than the other study variables, as indicated by a mean score of 1.87 (for a 6-point scale). In order to determine whether the variable should be transformed, non-parametric correlations between the distress emotions scale and all other variables were run and compared with their parametric equivalent. Non-parametric correlation is based on ranked scores rather than absolute values. It therefore provides an index of the strength of a relationship that does not require the data to be normally distributed (Bryman & Cramer, 1997). Comparison of Pearson's r and Spearman's ρ found equivalent results. The same variables showed significant relationships with distress emotions, and the size of the values varied by no more than .04. It was therefore concluded that transforming distress emotions would bring no additional benefits to further analysis. Indeed, it is generally accepted that multivariate statistical methods are relatively robust to moderate violations of the assumptions underpinning them, including normality (Tabachnick & Fidell, 1989). Note however that all of the study's data violated the assumption of independence. This is a more serious violation, the nature and implications of which are discussed in detail later, in the analysis strategy section.

The reliability of the study variables was also examined to check the robustness and suitability of the data for further analysis. Alpha coefficients were calculated for all scale variables. Only specific anxiety fell slightly below the .7 standard with a value of .68. All other scales had good or very good internal consistency. Table 8.1 shows the means, standard deviations, and alphas for all scales used in the study.

1.3 Differences in Supervisor Caregiving Between Wards

A key assumption underpinning the research model and theory is that supervisors differ systematically in the quality of caregiving they provide their respective employees. Perceptions of caregiving by individuals with the same supervisor would be expected to vary

slightly but not significantly. However, when comparing across groups of individuals with different supervisors, there should be significant between group differences. This assumption was tested using a one-way ANOVA of supervisor caregiving by ward. The results supported the assumption ($F(46,135) = 2.69, p < .001$).

1.4 Inter-correlations Between the Independent and Dependent Variables

Given the exploratory nature of the research, it was considered appropriate to examine the correlations between all of the independent and dependent variables in the model. In particular, it was reasoned that if no significant bivariate associations were found between supervisor caregiving (IV), specific avoidance and specific anxiety (IVs/DVs), and the interpretation and emotion outcomes (DVs), further analysis would be unlikely to find support for the research model. Pearson product moment correlations were run to find out the size and direction of relationships between these key variables. Table 8.1 shows the results.

Table 8.1: *Pearson Product Moment correlations, means, standard deviations, and alpha coefficients for all variables in Study 3*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------------------------------|---------|--------|--------|--------|--------|--------|--------|--------|------|
| 1. Supervisor Caregiving ¹ | - | | | | | | | | |
| 2. Specific Avoidance ¹ | -.69*** | - | | | | | | | |
| 3. Specific Anxiety ¹ | .20** | -.11 | - | | | | | | |
| 4. Global Avoidance ¹ | -.29*** | .44*** | -.04 | - | | | | | |
| 5. Global Anxiety ¹ | -.27*** | .42*** | .22** | .32*** | - | | | | |
| 6. Event Interpretation ² | -.78*** | .62*** | -.08 | .29*** | .37*** | - | | | |
| 7. Negative Emotions ² | -.17* | .21** | .31*** | -.08 | .28*** | .29*** | - | | |
| 8. Anger Emotions ² | -.20** | .18** | .27*** | -.10 | .19* | .31*** | .94*** | - | |
| 9. Distress Emotions ² | -.05 | .19** | .28*** | .00 | .35*** | .14 | .74*** | .47*** | - |
| Mean | 4.70 | 3.28 | 3.35 | 3.13 | 3.00 | 2.49 | 2.98 | 3.87 | 1.87 |
| Std Dev | 1.32 | 1.33 | .97 | .88 | .92 | 1.09 | .86 | 1.18 | .74 |
| Alpha | .97 | .85 | .68 | .89 | .90 | .94 | .90 | .91 | .75 |

Note: ¹ indicates measures with a 7-point scale range; ² indicates measures with a 6-point scale range;
 *** $p < .001$ ** $p < .01$ * $p < .05$

It can be seen that, consistent with the results of Study 2, supervisor caregiving was strongly and negatively associated with specific avoidance ($r = -.69, p < .001$). However, in contrast to the previous study's findings, the correlation between supervisor caregiving and specific anxiety was positive instead of negative ($r = .20, p < .01$). There was a negative correlation between supervisor caregiving and event interpretation as predicted ($r = -.78, p < .001$), although this was a stronger relationship than anticipated. In line with expectations, both the overall measure of negative emotions and its anger subscale were significantly and negatively associated with supervisor caregiving ($r = -.17, p < .05$ and $r = -.20, p < .01$).

respectively). However, the relationship between supervisor caregiving and the distress emotions subscale was not significant ($r = .05$, ns).

As expected, specific avoidance and specific anxiety correlated positively and significantly with the negative emotion outcomes. Also consistent with expectations, the relationships appeared stronger for specific anxiety than for specific avoidance. Only specific avoidance was significantly associated with event interpretation however (avoidance $r = .62$, $p < .001$ and anxiety $r = -.08$, ns respectively). Specific models correlated modestly with their global counterparts as expected. An unexpected finding was that global anxiety was moderately correlated with specific avoidance ($r = .42$, $p < .001$). Also unanticipated were the small relationships between the global dimensions of attachment and supervisor caregiving (global avoidance $r = -.29$, $p < .001$, and global anxiety $r = -.27$, $p < .001$). This is at odds with Study 1 in which non-significant associations between global attachment and supervisor caregiving were found.

Overall, despite a few anomalies, the correlations were broadly consistent with predictions. There were a sufficient number of significant relationships between variables to warrant proceeding with hypothesis testing.

1.5 Testing for Confounded Variables

The correlations between supervisor caregiving and event interpretation, and supervisor caregiving and specific avoidance were very high (around .70 and above). This was below the .80 level at which collinearity and multicollinearity begin to affect analysis (Tabachnick & Fidell, 1989). However, the levels were high enough to warrant speculation that the variables overlapped conceptually. If the overlap is too great, including all of the variables together in the subsequent analysis is redundant (Tabachnick and Fidell, 1989). From the review of the literature, the three variables should be theoretically distinct. The correlations found here may simply have been inflated by common method variance and the halo effect discussed at the end of chapter 6.

It is possible to test for overlapping, or confounded, variables by running exploratory factor analysis on the items of both affected variables together. If the items for each variable load clearly on their own separate factors the variables are not confounded, and should

contribute meaningfully to multivariate analysis (Hair et al., 1998). This procedure was performed for supervisor caregiving and event interpretation, and for supervisor caregiving and specific avoidance. (The results of the factor analyses can be seen in the appendix 11.) For each pairing it was found that the two variables loaded on their own factors, without major cross-loading of items between the factors. It was concluded that while the relationships between the variables were evidently very strong, the variables were not confounded. Thus, it was decided to proceed with further analysis using all variables as specified by the research model.

1.6 Relationships Between Dependent Variables and Background Variables

Due to the lack of empirical research on attachment and emotions in supervisory relationships it was decided to conduct a thorough analysis of the relationships between all dependent variables and background variables used in the study. (Note that because of the nature of the research model and hypotheses, all variables except supervisor caregiving serve as dependent variables at some stage in the subsequent analysis). If significant associations were found, the relevant background variables would need to be taken into account (controlled for) when testing the hypotheses. Pearson correlations were run to examine the relationships between the dependent variables and all dichotomous and continuous background variables. One-way ANOVAs were conducted to test for significant differences in the dependent variables between occupational grades. The 'ethnic group' variable was recoded and examined using t-tests. The full results of these analyses can be found in the appendix 11. The key issues are summarised below:

Age – of all the background variables tested, age had the greatest number of significant relationships with the dependent variables. Small but significant correlations were found between age and all variables, except global anxiety and the emotion subscales. Specific and global avoidance were positively related to age ($r = .18, p < .05$ and $r = .27, p < .01$ respectively) while specific anxiety was negatively related to age ($r = -.16, p < .05$). Older individuals were also more likely to interpret events negatively ($r = .15, p < .05$), but less likely to report negative emotions overall ($-.16, p < .05$). Older individuals tend to experience greater life satisfaction and less anxiety, both in and out of work (Warr, 1996), so they might be expected to report less negative emotion overall, yet this does not fit easily with the more negative interpretations of events observed here. Note, however that the pattern of

correlations of age with interpretation and overall emotions mirrors the anticipated relationships between working models and these DVS. Thus, age may appear to be related to interpretation and emotions at least partly because of shared variance with the working model variables.

It is notable that the majority of research on adult attachment has been conducted using samples of United States college students. Therefore, little or nothing is known about age effects on the development of working models (Consedine & Magai, 2003). Without further research it is not possible to ascertain whether the present results are sample-specific. However, the correlations between age and specific working models may indicate that the development of working models is influenced to a small extent by the amount of previous experience an individual has had of supervisory relationships (c.f. Collins & Read, 1994). Consistent with this interpretation, age is quite strongly correlated with organisational tenure (see below). Thus, for example, relatively inexperienced employees may be more sensitive to issues affecting the self-concept in the relationship (anxiety). Conversely, older, more experienced workers may have developed more negative expectations of the supervisor (avoidance) as a result of past supervisory experiences. Overall, given the degree of interrelationship between age and the dependent variables, it was deemed appropriate to control for age in subsequent analysis.

Gender (employee and supervisor) – The literature review indicated that previous research has generally not found evidence of gender differences in either global, or relationship-specific, attachment working models (e.g. Hazan & Shaver, 1987; Pierce & Lydon, 2001). However, employee gender effects might be expected to influence the key dependent variable for the research – self-reported negative emotional reactions. In particular, previous studies indicate that women may be more emotionally self-aware, and more emotionally expressive, than men (Fisher, 2000). In a similar vein, regarding supervisor gender, there is some evidence that women are more likely to be perceived as transformational leaders (Cleveland, Stockdale & Murphy, 2000). As noted earlier, this construct has some parallels with the concept of supervisor caregiving. Thus, under normal circumstances it would be important to control for both employee and supervisor gender. However, in the present study, the vast majority of the sample was female (94%) and had female supervisors (92%). In fact there were just four male supervisors in the sample. On these grounds, it was concluded that it would not be relevant or meaningful to include gender and supervisor gender as variables in the study.

Nevertheless, the possibility of gender effects should be kept in mind when interpreting the results.

Ethnic Group – To date, no research has explicitly examined the emotional experiences of ethnic minorities in the workplace. However, there is some evidence to suggest that perceptions of discrimination by minority employees contribute to workplace stress and depression (Cleveland, Stockdale & Murphy, 2000). Given that the present study concerns perceptions of supervisor behaviour and associated negative emotional reactions, ethnic group might be an important variable to take account of, as a proxy for possible discrimination effects. Alternatively, or additionally, different ethnic groups might hold different culturally-based expectations regarding the role of the supervisor (e.g. as more or less caring). This in turn might affect their responses to the survey. In the light of these issues, independent t-tests were conducted to look for differences between ‘white’ and ‘non-white’ respondents on each of the dependent variables (DVs). While this simple dichotomisation cannot satisfactorily capture the potential cultural diversity of respondents, it may be useful in providing a basic indication of shared perceptions and experiences at work. The t-tests found no significant associations with any of the DVs on this occasion (see appendix 11, p. 320). Given that the majority of the sample was white (83%), with only 30 individuals belonging to an ethnic minority group, there may in fact be insufficient power to make meaningful comparisons. On statistical grounds, therefore, ethnic group was not included in further analysis.

Supervisor Tenure – no significant associations were found between the length of the supervision relationship and any of the dependent variables. However, an association could be expected on theoretical grounds because working relationships, and specific working models in particular, are dynamic – they are thought to develop and change over time as the result of new experiences (Collins & Read, 1994; Gabarro, 1987). Therefore, it was decided to include supervisor tenure as a control variable in further analysis.

Job Tenure and Organisational Tenure – both types of tenure had a small significant correlation with global avoidance, but were not significantly related to any other dependent variables. Note however that job tenure and age had a correlation of $r = .47$ ($p < .001$), and organisational tenure and age were correlated at $r = .59$ ($p < .001$). On these grounds it was decided that age could be used as proxy for job and organisational tenure.

Grade – nurses in higher grades reported significantly lower distress emotions ($F(2,180) = 5.81, p < .01$). No other significant relationships were found with the dependent variables. To test whether the association between grade and distress emotions was due to the fact that nurses working in higher grades were older, a further one-way ANOVA between age and distress emotions was conducted. There were no significant differences ($F(2,180) = 1.5, ns$). This suggests that the influence of grade was independent of any age-related effects. Therefore age could not be used as a proxy for grade, and grade was a candidate for selection as a control variable whenever distress emotions was the dependent variable of interest.

Site, Full/Part-time, Ward Size, and Mail-group – None of the dependent variables was significantly associated with these background variables. Therefore it was not necessary to take them into account during hypothesis testing.

In sum, these findings suggest that age and grade should be controlled during hypothesis testing for empirical reasons, and supervisor tenure should be controlled on theoretical grounds. Overall, the preliminary analyses established that the survey data were reliable, and suitable for further analysis.

2. Analysis Strategy

The study yielded data that were hierarchical and non-independent in nature. This has important theoretical and analytical implications. Specifically, because respondents worked in various different wards, the individual level data gathered by the survey were actually ‘nested’ within workgroups. According to Bliese (2002), when data are hierarchical in this way, individuals’ interpretations of, and reactions to, their environments will be shaped to some degree by the social interaction inherent in group-membership. In multilevel terminology (Bryk & Raudenbush, 1992), this implies that higher-level processes resulting from group-membership, or other contextual factors, can have a significant impact on the lower-level relationships between variables. Such effects have been identified even with the kind of phenomena that were traditionally assumed to be exclusively individual-level (e.g. well-being, personality, job satisfaction) (Bliese, 2002). In the present study, therefore, given that different groups of nurses worked in different environments (wards) and had different supervisors, it was assumed that group-membership or context effects would influence the individual-level relationships of interest. In such instances, when individuals are the unit of

analysis but the data are influenced by, depend on, or cluster according to group-membership, the data are referred to as non-independent (Kenny & Judd, 1986, 1996).

Sometimes researchers are interested in modelling and evaluating the effects of higher-level factors (i.e. non-independence). However, the present research hypotheses pertain only to individuals' own perceptions, cognitions and emotional reactions. The influence of group-membership, or non-independence, on responses is seen as an extraneous factor that may mask the true nature of relationships between variables. In effect, for the purposes of the present research, group-related effects represent a nuisance variable that must be controlled for. Crucially, because the data are assumed to be non-independent, they are unsuitable for analysis using conventional multivariate techniques such as regression (Kenny & Judd, 1986). This is because a key assumption underlying multivariate regression is that the data are *independent* (i.e. do not cluster as described above) (Tabachnick & Fidell, 1989). Kenny and Judd (1986) demonstrated that ordinary regression techniques are not robust to violations of independence. If even minimal non-independence is present and not controlled for, it causes bias in the estimation of standard error. In turn, this impacts upon whether or not a predictor is calculated as statistically significant (Bliese, 2000). The present study data are individual-level data that are assumed to vary among members of the same group, as well as between groups. This is known as level 1 data, in multilevel terminology (Bryk & Raudenbush, 1992). The biasing effect of non-independence on level 1 data has been shown to increase the likelihood of committing a Type II error (Kenny & Judd, 1986). In short, by ignoring non-independence and proceeding with standard multivariate analyses, one is more likely to conclude that findings are not significant when in fact they are.

In the light of the above, Multilevel Random Coefficient modelling (MRC) (Bryk & Raudenbush, 1992) was used to test the research hypotheses. MRC is a recently developed statistical technique that allows the researcher to examine individual-level relationships (level 1 data) while controlling for the higher-level effects of group membership (level 2 data). MRC is conceptually similar to familiar regression models. Basically, it is an extended form of the ordinary regression equation, adapted to include additional terms that represent, or model, higher-level effects. When controlling for nuisance effects of non-independence, the most commonly used model is one that incorporates a term allowing the intercept of the regression line to vary randomly across groups (Bliese, 2002). (The intercept is usually held constant in ordinary regression and hence is a major source of the bias just discussed). Thus,

in the present study, the hypothesised relationships (among level 1 variables) were tested using a regression-like model that contained a term to control for variance due to individuals' membership of different wards (a level 2 variable).

Note that it was not the intention of the study to quantify or describe the impact that working in different wards had on the hypothesised relationships. The aim was simply to test the data at the individual level of analysis using those statistical techniques that were most appropriate to the nature of the data. For this reason, level 2, or ward-level, effects are not reported here.

3. Results of Multilevel Analysis

The Pearson product moment correlations demonstrated the existence, size and direction of relationships between the key variables. However, these simple correlations do not take into account the influence of background variables or group membership, nor do they provide any indication of the relative proportions of variance in the dependent variables accounted for by each of the predictor (independent) variables. The most appropriate statistical technique for resolving these issues is multilevel analysis. The next step was therefore to test the hypotheses using MRC analysis. Multilevel models can be estimated using a variety of statistical packages. The most commonly cited software is HLM (Bryk & Raudenbush, 1992). The present data were analysed using the NMLE library for S-PLUS statistical software because it was an alternative package that was readily available to the researcher. Bliese (2002) provides detailed information on performing MRC analysis using S-PLUS, and the following analyses were therefore based on his guidelines. Before presenting the analysis two issues need mentioning:

Control Variables - The preceding discussion demonstrated the importance of controlling for the effects of group membership, specifically individuals' wards. In addition, the preliminary analysis established that age and supervisor tenure should be controlled for throughout subsequent analysis. Grade appeared important to take into account when investigating distress emotions. On this basis, all of the reported MRC analyses estimated models that included terms to control for the influence of age, supervisor tenure, and ward/group effects. Only models concerning distress emotion contained a term to control for grade effects. Because grade was a categorical variable it was 'dummy-coded' prior to use in the analysis.

Estimating Explained Variance in MRC Analysis - MRC analysis using S-PLUS differs from regression analysis using SPSS, or other standard statistical software, in an important respect. Whereas SPSS routinely provides variance estimates (R^2) as part of the regression model output, they must be calculated separately for MRC analysis with S-PLUS. Following Bliese (2002), to calculate the proportion of variance that a predictor 'explains' in a dependent variable it is necessary to estimate two models: a model containing all variables relevant to the hypothesis (henceforth termed the 'research model'); and a 'null model' which is identical to the research model except that it excludes the predictor variable of interest. The variance explained by the predictor is then derived from a simple equation: $1 - (\text{variance with predictor} / \text{variance without predictor})$.

in model / variance without predictor in the model). By extension, in order to calculate total variance explained by a research model, it is compared with a null model that contains the dependent variable but neither control nor predictor variables. MRC models partition variance into between-group (intercept) variance and within-group (residual) variance. The within-group variance represents the individual-level effects of the predictor(s), so only this variance was estimated and reported in the present study. Unless otherwise specified, the procedures outlined for calculating variance were followed in all analyses reported here. The term 'explained variance' will henceforth be used to refer to the unique individual-level variance explained by the predictor(s) in a given statistical model, (i.e. excluding variance accounted for by control variables). The analysis and findings will now be discussed in relation to each research question and hypothesis in turn.

3.1 Supervisor Caregiving and the Development of Specific Attachment Models

Q1. Does supervisor caregiving predict relationship-specific attachment working models?

This question addressed the first aim of the present study, namely, to replicate the pattern of associations previously found between supervisor caregiving and the dimensions of specific attachment. Study 2 (Chapter 6) found a strong negative correlation between specific avoidance and supervisor caregiving, and a weak negative association between supervisor caregiving and specific anxiety. Of interest was whether similar results would be found using a different sample and multivariate (as opposed to bivariate) analysis.

H1.1 Supervisor caregiving will negatively predict specific avoidance.

To test this hypothesis an MRC model was estimated in which specific avoidance was the dependent variable, and supervisor caregiving was the predictor. Table 8.2 shows the results. The coefficient, γ , is the MRC equivalent of an unstandardised regression coefficient. The relative influence of predictors is therefore more easily interpreted with reference to the corresponding t-value, since this equates to a standardised beta weight. Both estimates are reported in all subsequent tables. The results indicate that, after taking into account the effects of age, supervisor tenure, and group-membership, supervisor caregiving was strongly and negatively related to specific avoidance ($\gamma = -0.69$, $p < .001$). Thus the hypothesis was supported.

Table 8.2: Results of MRC analysis predicting Specific Avoidance and Specific Anxiety from Supervisor Caregiving. (H1.1 and H1.2).

| Variables | γ | t-value |
|---------------------------|----------|---------|
| <u>Specific Avoidance</u> | | |
| <u>Predictor</u> | | |
| Supervisor Caregiving | -0.69*** | -11.65 |
| <u>Specific Anxiety</u> | | |
| <u>Predictor</u> | | |
| Supervisor Caregiving | 0.14* | 2.44 |

Note: * $p < .05$ *** $p < .001$

H1.2 Supervisor caregiving will negatively predict specific anxiety, but the association will be weaker than for specific avoidance.

This hypothesis was tested using the procedure described for H1.1. In this instance specific anxiety was the dependent variable in the model. Table 8.2 presents the results. Given that specific anxiety and specific avoidance are theoretically orthogonal, and uncorrelated in this study, it is possible to compare the coefficients and t-values across models. As predicted, the relationship between supervisor caregiving and specific anxiety was considerably weaker and less significant ($\gamma = 0.14$, $p < .05$) than the relationship between supervisor caregiving and specific avoidance. However, contrary to the expected negative relationship, it was found that supervisor caregiving had a positive association with specific anxiety. This hypothesis was therefore not fully supported.

3.2 Distinguishing Specific and Global Attachment Models

Q2. To what extent are specific and global attachment working models related constructs?

Previous research has found only a small overlap between global and specific attachment models. For example, Pierce and Lydon (2001) found that global models accounted for no more than 5% of variance in any given relationship-specific model across a range of different types of relationships. The current research sought to determine whether global models would account for equivalent proportions of variance in supervisor-specific attachment models.

H2.1 Global avoidance will account for modest variance in specific avoidance.

In order to determine the degree of overlap between global and specific avoidance constructs, a model was estimated with specific avoidance as the dependent variable and

global avoidance as the predictor. The aim was to establish the degree to which individuals' models of global avoidance could account for variance in their corresponding models of specific avoidance. The proportion of variance explained by global avoidance was calculated from the formula: $1 - (\text{variance with predictor in model} / \text{variance without predictor in model})$. It can be seen from Table 8.3 that global avoidance significantly predicted specific avoidance ($\gamma = .61, p < .001$) and accounted for 16% of variance. This is a greater proportion of variance than was predicted, so the hypothesis was not fully supported. Nevertheless, a substantial proportion (84%) of variance in specific avoidance remained unexplained by global avoidance.

Table 8.3: *Results of MRC analysis showing proportions of variance explained in Specific Avoidance and Specific Anxiety by their global attachment counterparts. (H2.1 and H2.2)*

| Variables | γ | t-value |
|---------------------------|----------|---------|
| <u>Specific Avoidance</u> | | |
| <u>Predictor</u> | | |
| Global Avoidance | 0.61*** | 6.00 |
| Explained variance: | 0.16 | |
| <u>Specific Anxiety</u> | | |
| <u>Predictor</u> | | |
| Global Anxiety | 0.24** | 3.04 |
| Explained variance: | 0.05 | |

Note: * $p < .05$ ** $p < .01$ *** $p < .001$

H2.2 Global anxiety will account for modest variance in specific anxiety.

This hypothesis was tested using the procedure outlined for H2.1. In this case, global anxiety entered the model as the predictor variable, and the dependent variable was specific anxiety. The hypothesis was supported. As can be seen in Table 8.3, global anxiety was significantly and positively related to specific anxiety ($\gamma = .24, p < .05$), and the proportion of variance explained in specific anxiety by global anxiety was 5%. This is in line with the findings of Pierce and Lydon (2001).

3.3 Specific Attachment Models, Event Interpretation, and Negative Emotions.

Q3. Do relationship-specific models of attachment predict negative interpretation of events and negative emotional reactions?

From the literature review, it was expected that both dimensions of specific attachment would be associated with a negative interpretation of events in response to the hypothetical scenarios. It was predicted that specific avoidance would be associated primarily with other-focused emotions, while specific anxiety would be related to both other- and self-focused emotions. Additionally, compared with specific avoidance, individuals scoring high on specific anxiety should be more likely to report intense overall negative emotional reactions. This question was first explored in relation to event interpretation, then negative emotional reactions.

3.3.1 Interpretation of Events

H3.1 Both specific avoidance and specific anxiety will be positively related to negative event interpretation.

This hypothesis was first tested by estimating an MRC model with event interpretation as the dependent variable, and specific avoidance as the predictor. Clear support was found for this aspect of the hypothesis. As can be seen in Table 8.4, there was a strong relationship between specific avoidance and event interpretation ($\gamma = .48$, $p < .001$).

Table 8.4: *Results of MRC analysis predicting Event Interpretation from Specific Avoidance and Specific Anxiety. (H3.1)*

| Variables | Interpretation | |
|--------------------|----------------|---------|
| | γ | t-value |
| <u>Predictor</u> | | |
| Specific Avoidance | 0.48*** | 9.41 |
| <u>Predictor</u> | | |
| Specific Anxiety | -0.04 | -0.60 |

Note: * $p < .05$ *** $p < .001$

The results indicate that individuals scoring high on the specific avoidance dimension were much more likely to interpret their supervisors' actions in a negative light than were low scorers on specific avoidance. Table 8.4 also shows the results of the second MRC model, estimated to test the relationship between specific anxiety and event interpretation. In this case, there was no statistical evidence that specific anxiety significantly contributed to the prediction of interpretation ($\gamma = -.04$, ns). These data suggest that when individuals held anxious specific models of their supervisory relationships it did not adversely influence the way in which they interpreted their supervisors' actions.

3.3.2 Negative Emotions

H3.2 Specific avoidance will be positively related to other-focused (anger) emotions, but there will be little or no relation with self-focused (distress) emotions.

Two models were estimated to examine the proposed relationships. In the first, anger emotions were the dependent variable and specific avoidance the predictor. In the second model, distress-related emotions were the dependent variable. Table 8.5 shows that partial support was found for the hypothesis. The relationship between specific avoidance and anger emotions was positive and significant ($\gamma = .19$, $p < .01$). A smaller, or non-significant, relationship was expected between specific avoidance and distress emotions. In fact, individuals scoring high on avoidance were just as likely to react to the supervisor scenarios with distress emotions as with anger emotions ($\gamma = .13$, $p < .01$). (This is more easily observed by comparing the respective t-values.)

Table 8.5: Results of MRC analysis predicting overall negative emotions, anger emotions, and distress emotions from specific avoidance and specific anxiety (H3.2 H3.3, H3.4)

| Variables | <u>Overall Emotions</u> | | <u>Anger Emotions</u> | | <u>Distress Emotions</u> | |
|---------------------|-------------------------|---------|-----------------------|---------|--------------------------|---------|
| | γ | t-value | γ | t-value | γ | t-value |
| <u>Predictor</u> | | | | | | |
| Specific Avoidance | 0.16*** | 3.31 | 0.19** | 2.81 | 0.13** | 3.17 |
| Explained Variance: | 0.06 | | 0.04 | | 0.05 | |
| <u>Predictor</u> | | | | | | |
| Specific Anxiety | 0.26*** | 3.97 | 0.31*** | 3.38 | 0.20*** | 3.53 |
| Explained Variance | 0.08 | | 0.06 | | 0.06 | |

Note: ** $p < .01$ *** $p < .001$

H3.3 Specific anxiety will be positively related to both other-focused (anger) emotions and self-focused (distress) emotions.

Table 8.5 also shows the results of the two MRC models that were run in order to test this hypothesis. In the first model, the dependent variable was anger emotions and specific anxiety was the predictor. There was a significant effect of specific anxiety on anger-related emotions ($\gamma = 0.31$, $p < .001$), with 6% of variance in the dependent variable accounted for. The second model used distress emotions as the dependent variable. Again a significant and positive relationship was found ($\gamma = 0.20$, $p < .001$), and specific anxiety explained 6% of variance in distress emotions. Overall, full support was found for the hypothesised relationships.

H3.4 Specific anxiety will be more strongly related to overall intensity of negative emotions than specific avoidance.

The zero-order correlations (Table 8.1) provided preliminary support for this hypothesis. Two MRC models were estimated to test whether the proposition held after partialling out the influence of background and group-level variables. Overall negative emotion was the dependent variable, with specific avoidance and specific anxiety as the predictors in the first and second models respectively. As can be seen in Table 8.5, specific anxiety was positively associated with overall intensity of negative emotions ($\gamma = .26$, $p < .001$). Specific avoidance was also significantly related to overall negative emotions ($\gamma = .16$, $p < .001$). Thus, individuals scoring high on either dimension of specific attachment tended to report increased negative emotional reactions in response to the hypothetical scenarios. A comparison of the MRC coefficients, t-values, and variance estimates for specific anxiety and specific avoidance respectively, shows that specific anxiety was a stronger predictor of negative emotions overall. In particular, specific anxiety accounted for an additional 2% of variance in overall negative emotions. Thus, individuals scoring high on the dimension of specific anxiety tended to believe that, as a result of their supervisors' actions, they would experience a range of negative emotions more intensely than would individuals scoring high on avoidance. This is fully consistent with the predictions.

3.4 Relative Influence of Specific Attachment Models and Global Attachment Models

Q4. What are the relative contributions of specific and global working models to the prediction of negative event interpretation and negative emotional reactions?

From the literature review it was expected that, in general, relationship-specific working models would be better predictors of cognitive and emotional reactions in supervisory relationships than global dimensions. The question was first investigated by comparing the relative contributions of specific vs. global avoidance, and specific vs. global anxiety, to each dependent variable. Secondly, given that individuals have scores on both the anxiety and avoidance dimensions of specific and global attachment, it was useful to explore how much variance in the dependent variables was explained by the combined influence of the specific dimensions, over and above the variance accounted for by the combined effects of the global dimensions.

3.4.1 Event Interpretation

H4.1 Relative to global avoidance, specific avoidance will make a greater contribution to the prediction of event interpretation.

The relative contributions made by global and specific avoidance to the prediction of event interpretation were assessed by the MRC equivalent of simultaneous regression. Hence the two attachment dimension predictors were run together in a single model. The contributions made by each predictor are signalled by the relative sizes of the MRC coefficient (γ) and t-values. Table 8.6 shows that when the contributions of the two variables were compared, specific avoidance was clearly the greater contributor to the prediction of event interpretation ($\gamma = 0.47$, $p < .001$). Despite a significant bivariate correlation (see Table 8.1) between global avoidance and interpretation that indicated a tendency for high scorers on global avoidance to make negative attributions for supervisor's actions, this relationship became non-significant after controlling for background variables and group level effects using MRC analysis ($\gamma = 0.05$, ns). These results may also signify that the observed correlation was in part due to variance shared with specific avoidance. Nevertheless, the findings support the hypothesis.

Table 8.6: Results of MRC analysis showing relative contributions of specific and global attachment dimensions to event interpretation (H4.1 and H4.2)

| Variables | Interpretation | |
|--------------------|----------------|---------|
| | γ | t-value |
| <i>H4.1</i> | | |
| <u>Predictors</u> | | |
| Global Avoidance | 0.05 | 0.53 |
| Specific Avoidance | 0.47*** | 8.28 |
| <i>H4.2</i> | | |
| <u>Predictors</u> | | |
| Global Anxiety | 0.41*** | 5.00 |
| Specific Anxiety | -0.15 | -1.86 |

Note: * $p < .05$ *** $p < .001$

H4.2 The influence of global anxiety is expected to be quite strong. Nevertheless, specific anxiety will be at least as important as global anxiety in predicting event interpretation.

The procedure outlined for H4.1 was also used to test this hypothesis. After modelling the effects of specific and global anxiety together on event interpretation, mixed support was found for the proposition (see Table 8.6). As anticipated, global anxiety was a strong and significant predictor of event interpretation ($\gamma = 0.41$, $p < .001$). Overall, however, it is clear that global anxiety was the stronger, and therefore more important, predictor of event interpretation because the relationship between event interpretation and specific anxiety was non-significant ($\gamma = -0.15$, ns).

3.4.2 Negative Emotions

H4.3 Relative to global avoidance, specific avoidance will be a predictor of greater importance for overall negative emotions and other-focused (anger) emotions, although neither attachment dimension is expected to strongly predict self-focused (distress) emotions.

Three models were estimated to test the relative contributions of the avoidance dimensions to the prediction of each of the emotion outcomes. Table 8.7 presents the results of the analyses. Comparison of the γ coefficients and t-values for the two predictors shows that, in absolute terms, specific avoidance was indeed the more important and more significant predictor of anger ($\gamma = 0.26$, $p < .001$), distress ($\gamma = 0.15$, $p < .001$), and negative

emotions overall ($\gamma = 0.21, p < .001$). An interesting finding is that global avoidance, which did not correlate significantly with any of the emotion variables (see Table 8.1), not only significantly predicted anger emotions ($\gamma = -0.18, p < .05$) and overall negative emotions ($\gamma = -0.27, p < .05$), it did so in a *negative* direction in this analysis. Thus the higher an individuals' score on global avoidance, the *less* likely they were to report that they would experience negative emotions, or anger emotions, in response to the hypothetical supervisor behaviours. Global avoidance was not a significant predictor of distress emotions, however, which was more in line with expectations. In view of the surprise findings, and the stronger than anticipated relationship between specific avoidance and distress emotions, the hypothesis was partially supported.

Table 8.7: Results of MRC analysis showing the relative contributions of specific and global anxiety, and specific and global avoidance, to the prediction of negative emotional reactions (H4.3 and H4.4)

| Variables | Overall Emotions | | Anger Emotions | | Distress Emotions | |
|--------------------|------------------|---------|----------------|---------|-------------------|---------|
| | γ | t-value | γ | t-value | γ | t-value |
| <i>H4.3</i> | | | | | | |
| <u>Predictors</u> | | | | | | |
| Global Avoidance | -0.18* | -2.14 | -0.27* | -2.40 | -0.08 | -1.18 |
| Specific Avoidance | 0.21*** | 3.93 | 0.26*** | 3.60 | 0.15*** | 3.37 |
| <i>H4.4</i> | | | | | | |
| <u>Predictors</u> | | | | | | |
| Global Anxiety | 0.22** | 3.24 | 0.19* | 2.00 | 0.25*** | 4.29 |
| Specific Anxiety | 0.22** | 3.25 | 0.26** | 2.86 | 0.14** | 2.50 |

Note: * $p < .05$ ** $p < .01$ *** $p < .001$

H4.4 Relative to global anxiety, specific anxiety will be a predictor of equal or greater importance for overall emotional intensity, other-focused (anger) emotions and self-focused (distress) emotions.

Three MRC models were estimated, one for each of the emotion outcome variables. Specific and global anxiety were co-predictors in each model in order to assess their relative influences. Support for the hypothesis would be confirmed if the γ coefficients (and t-values) for specific anxiety were equal to, or exceeded, those for global anxiety. The table (8.7) shows that when both anxiety dimensions were entered into the equation, specific anxiety was the more important predictor of anger emotions (specific $\gamma = 0.26, p < .01$, global $\gamma = 0.19, p < .05$). Conversely, global anxiety made a greater contribution to the prediction of distress emotions (specific $\gamma = 0.14, p < .01$, global $\gamma = 0.25, p < .001$). The results for overall

negative emotions show that both specific and global anxiety contributed equally when the subscale scores were added together ($\gamma = 0.22$, $p < .01$ for specific and global anxiety). Taking the results together, it appears that there was partial support for the hypothesis.

3.4.3 Combined Effects

H4.5 The combined effects of specific anxiety and specific avoidance (i.e. relationship-specific attachment) will account for significant variance in event interpretation over and above the variance accounted for by the combined effects of global anxiety and global avoidance (i.e. global attachment).

In order to test this hypothesis, two models were estimated in a procedure that is equivalent to hierarchical regression. The first model contained global avoidance and global anxiety as predictors of event interpretation. The second model added specific avoidance and specific anxiety to examine their influence after controlling for the effects of the global attachment dimensions. If the second model accounted for significant additional variance compared to the first model, the hypothesis would be supported. (In MRC analysis using S-Plus, a significant increase in explained variance is indicated by a significant “-2 Log Likelihood” test. This test compares the amount of variance explained by each model to see which is the “better” model).

Table 8.8: *Results of MRC analysis showing the variance explained in event interpretation by specific attachment, over and above the variance explained by global attachment (H4.5)*

| Variables | Interpretation | |
|---------------------|----------------|---------|
| | γ | t-value |
| <i>Model 1</i> | | |
| <u>Predictors</u> | | |
| Global Avoidance | 0.23* | 2.45 |
| Global Anxiety | 0.31*** | 3.63 |
| Explained Variance: | 0.10 | |
| <i>Model 2</i> | | |
| <u>Predictors</u> | | |
| Global Avoidance | 0.01 | 0.15 |
| Global Anxiety | 0.17* | 2.09 |
| Specific Avoidance | 0.43*** | 7.14 |
| Specific Anxiety | -0.06 | -0.82 |
| Explained Variance: | 0.27 | |
| Explained Variance: | 0.17*** | |

Note: * $p < .05$ *** $p < .001$

Table 8.8 shows that the global dimensions together accounted for 10% of variance in event interpretation. However, after accounting for the influence of global attachment, specific attachment accounted for an additional 17% of the variance in event interpretation. An examination of the γ coefficients and t-values for specific avoidance and anxiety indicates that almost all of this additional explained variance was contributed to by specific avoidance since specific anxiety was not a significant predictor. Nevertheless, these findings broadly support the hypothesis.

H4.6 The combined effects of specific anxiety and specific avoidance (i.e. relationship-specific attachment) will account for significant variance in emotion outcomes (overall, other- and self-focused) over and above the variance accounted for by the combined effects of global anxiety and global avoidance (i.e. global attachment).

This prediction was tested using the procedure, similar to hierarchical regression, which was outlined for H4.5. Thus two models were estimated for each emotion outcome. The pairs of models (2x3) were then compared to see whether significant additional variance in the outcomes could be explained by specific attachment, after accounting for the influence of global attachment. The results of the analyses are shown in Table 8.9. The γ coefficients in the table indicate that specific avoidance and specific anxiety both contributed significantly to all emotion outcomes after taking in to account the influence of the global dimensions. However, it is also necessary to consider the increments in variance explained. Over and above the variance accounted for by global attachment, specific attachment explained an additional 9% of variance in anger emotions ($p < .001$), and 10% of variance in overall negative emotions ($p < .001$). Interestingly, the relationship between global anxiety and anger emotions became non-significant in the second model ($\gamma = 0.13$, ns). This may be due to shared or overlapping variance between global anxiety and the two specific attachment dimensions. Thus, global anxiety predicted anger emotions when considered separately, but overall, it added little variance that could not be accounted for by the specific attachment dimensions.

While specific attachment explained an additional 5% of variance in distress emotions, this was not a significant increase when the two models were statistically compared. In particular, global attachment alone explained a sizable 13% of variance in distress emotions. Most of this influence appeared to be attributable to global anxiety. Effectively, the addition of the specific attachment dimensions did not significantly improve the overall model. In all,

partial support was found for the superior predictive abilities of specific attachment. It is notable however that the total proportions of variance explained by specific and global attachment models together was substantial. Indeed, together, the different attachment dimensions accounted for 20% of variance in negative emotions overall.

Table 8.9: Results of Hierarchical MRC analysis showing the variance added by specific attachment dimensions to explanation of emotion outcomes. (H4.6)

| Variables | Overall Emotions | | Anger Emotions | | Distress Emotions | |
|---------------------|------------------|---------|----------------|---------|-------------------|---------|
| | γ | t-value | γ | t-value | γ | t-value |
| <i>Model 1</i> | | | | | | |
| <u>Predictors</u> | | | | | | |
| Global Avoidance | -0.15* | -1.98 | -0.22* | -1.97 | -0.09 | -1.39 |
| Global Anxiety | 0.32*** | 4.44 | 0.32** | 3.19 | 0.31*** | 5.20 |
| Explained Variance: | 0.10 | | 0.05 | | 0.13 | |
| <i>Model 2</i> | | | | | | |
| <u>Predictors</u> | | | | | | |
| Global Avoidance | -0.23** | -2.90 | -0.32** | -2.87 | -0.14* | -2.03 |
| Global Anxiety | 0.17* | 2.30 | 0.13 | 1.20 | 0.21*** | 3.36 |
| Specific Avoidance | 0.19*** | 3.53 | 0.26*** | 3.42 | 0.11* | 2.51 |
| Specific Anxiety | 0.24*** | 3.83 | 0.31*** | 3.42 | 0.16** | 2.89 |
| Explained Variance: | 0.20 | | 0.14 | | 0.18 | |
| Explained Variance: | 0.10*** | | 0.09*** | | 0.05 | |

Note: * $p < .05$ ** $P < .01$ *** $p < .001$

3.5 The Independent Effects Model versus The Interaction Model

Q5. Are the relationships underlying the associations between supervisor caregiving, attachment working models (specific and global), event interpretation, and negative emotional reactions best described by an 'Independent Effects Model', or by an 'Interaction Model'?

Hitherto, the hypotheses have concerned the direct relationships between the various attachment dimensions and the interpretation and emotion outcomes. These relationships constitute many of the main effects proposed by the Independent Effects and Interaction Models. The results revealed that: supervisor caregiving predicted specific avoidance and specific anxiety; specific avoidance and global anxiety predicted event interpretation; and all dimensions of specific and global attachment played a role in predicting negative emotional reactions. The remaining hypotheses investigate how these elements fit together according to

the broader theoretical framework. The role of supervisor caregiving in the model is examined in further detail because it is integral to the proposed theory of negative emotions in employee-supervisor relationships. In the section below, the Independent Effects Model is tested first. This is followed by the results of testing the Interaction Model.

3.5.1 Independent Effects Model

The central proposition of the 'Independent Effects Model' is that global and specific attachment models each uniquely contribute to variance in event interpretation, which in turn influences emotional responses. It remains to test the mediation effects in order to fully evaluate the model. Three mediation effects are proposed in the model:

1. Specific attachment (avoidance and anxiety) mediates the link between supervisor caregiving and event interpretation;
2. Event interpretation mediates the attachment-emotion association (except for distress emotions);
3. Specific attachment and event interpretation sequentially mediate the relationship between supervisor caregiving and negative emotional outcomes (except distress emotions).

In accordance with Baron and Kenny's (1986) guidelines for mediation regression, three models must be estimated in order to demonstrate mediation in MRC analysis:

1. A model of the relationship between the predictor(s) and mediator (where the mediator is the dependent variable)
2. A model of the relationship between the predictor(s) and the dependent variable
3. A model of the relationship between the dependent variable and the predictor(s) and mediator simultaneously.

Given that many of the main effects represented by the predictor-mediator models, and predictor-dependent variable models, have already been tested and discussed in relation to previous hypotheses, they are not replicated here. Only analysis that is pertinent to as yet untested paths/effects (in the theoretical models) is presented below.

3.5.1.1 The Mediating Effects of Specific Attachment in the Relationship Between Supervisor Caregiving and Event Interpretation.

Earlier MRC analyses (see Table 8.2) tested the relevant predictor-mediator relationships and revealed that supervisor caregiving significantly predicted both specific avoidance and specific anxiety. In order to establish mediating effects, it was also necessary to test the relationship between supervisor caregiving and event interpretation (predictor-DV), and the simultaneous effects of supervisor caregiving and each specific attachment dimension on event interpretation.

H5.1 Supervisor caregiving will be directly and negatively related to event interpretation

The current hypothesis tested the path between the predictor and the dependent variable, event interpretation. Table 8.10 (Analysis 1) shows that there was a strong negative relationship between supervisor caregiving and event interpretation ($\gamma = -0.65$, $p < .001$). Thus, there was a significant main effect of supervisor caregiving on event interpretation. Nurses who reported high supervisor caregiving believed they would be much less likely to interpret their supervisors' actions in a negative light. The hypothesis was supported. The mediation hypothesis was therefore tested next.

H5.2 Supervisor caregiving will contribute to event interpretation, mediated by specific anxiety and specific avoidance.

Two MRC models were estimated, with event interpretation as the dependent variable. In the first model, supervisor caregiving was the predictor and specific avoidance was the mediator. In the second model the mediator term was specific anxiety. Mediation would be supported if a) the specific attachment dimensions remained significantly associated with event interpretation, and b) there was a clear reduction in the size and/or significance of the supervisor caregiving-event interpretation relationship. Table 8.10 shows the results. Taking specific avoidance first, the table indicates that the requirements were met: specific avoidance remained significantly related to event interpretation ($\gamma = 0.12$, $p < .05$), and the size of the relationship between supervisor caregiving was reduced. This effect is better appreciated with reference to the change in t-values (a reduction of 5.60) and explained variance. The amount of variance in interpretation explained by supervisor caregiving was reduced by 25% (48-23) after taking into account the effects of specific avoidance. Based on these findings it is concluded that specific avoidance *partially* mediated the relationship between supervisor

caregiving and event interpretation. No evidence of a mediating effect was found for specific anxiety, however, since it was not significantly related to event interpretation in the final equation (analysis 3, Table 8.10).

Table 8.10: Results of MRC analyses testing mediation effects of specific avoidance and specific attachment on the relationship between supervisor caregiving and event interpretation (H5.1 and 5.2).

| Variables | Interpretation | |
|----------------------------------|----------------|---------|
| | γ | t-value |
| <i>Analysis 1</i> | | |
| <u>Predictor</u> | | |
| Supervisor Caregiving | -0.65*** | -15.77 |
| Variance explained by predictor: | 0.49 | |
| <i>Analysis 2</i> | | |
| <u>Mediator</u> | | |
| Specific Avoidance | 0.12* | 2.17 |
| <u>Predictor</u> | | |
| Supervisor Caregiving | -0.57*** | -10.17 |
| Variance explained by predictor: | 0.23 | |
| <i>Analysis 3</i> | | |
| <u>Mediator</u> | | |
| Specific Anxiety | 0.09 | 1.68 |
| <u>Predictor</u> | | |
| Supervisor Caregiving | -0.66*** | -15.88 |
| Variance explained by predictor: | 0.46 | |

Note: * $p < .05$ *** $p < .001$

3.5.1.2 Mediation of the Joint Effects of Global and Specific Models on Negative Emotions by Event Interpretation

The predictor-mediator and predictor-DV models were tested when examining the relative contributions of specific and global attachment dimensions to the prediction of event interpretation and emotion outcomes (see Tables 8.8 and 8.9). These analyses revealed that, when considered simultaneously, neither specific anxiety nor global avoidance (predictors) was significantly related to event interpretation (the mediator). According to Baron and Kenny (1986) this implies that further analysis would not support mediation effects involving

these variables. Nevertheless, they were included in the analysis because the model specifies that the four attachment dimensions each contribute to the outcomes. Hence, it was necessary to test whether the influence of specific avoidance and global anxiety on overall and anger emotions was mediated by event interpretation, whilst taking into account any contribution to the model by the other attachment dimensions.

A core assumption underpinning the theoretical model is that there is a link between the ways in which events are interpreted, and the resulting emotional reactions. This hypothesis was therefore tested prior to estimating the mediation model. (Recall that different predictions are made for other- and self-focused emotions because the measure of event interpretation focused primarily on other-blame.)

H5.3 Event interpretation will be directly and positively related to overall intensity of negative emotions and other-focused (anger) emotions, but there will be little or no association with self-focused (distress) emotions.

Three MRC models were estimated, one for each dependent variable. Event interpretation was the predictor in all models. Table 8.11 (Analysis 1) shows that full support was found for the hypothesis. Specifically, event interpretation significantly predicted anger emotions ($\gamma = 0.37$, $p < .001$), and there was a much smaller, less significant association with distress emotions ($\gamma = 0.11$, $p < .05$). Consistent with these findings, the relationship between event interpretations and overall negative emotions was also significant ($\gamma = 0.26$, $p < .001$). These findings are congruent with cognitive theories of emotion that posit negative attributions for others' behaviour as antecedents of anger-related emotions, but not distress-related emotions.

H5.4 Event interpretation will at least partially mediate the joint effects of specific and global attachment on overall negative emotions and other-focused (anger) emotions (but not self-focused (distress) emotions).

Having already conducted tests of the joint (i.e. relative) main effects of specific and global attachment on interpretation and emotion outcomes (see Tables 8.8 and 8.9), three final MRC models were estimated to test the mediating effect of event interpretation. A separate model was estimated for each emotion dependent variable. In each model the four attachment dimensions were modelled as the predictors, and event interpretation was the mediator. The

mediation effect would be supported if a) event interpretation remained a significant predictor of the emotion outcomes, and b) the previously significant relationships of global anxiety and specific avoidance with the emotion outcomes were reduced or non-significant. Table 8.11 (Analysis 2) shows the results of the analysis.

Table 8.11: Results of MRC analyses testing for mediating effects of event interpretation in the relationships between attachment models (specific and global) and emotion outcomes (H5.3 and H5.4).

| Variables | Overall Emotions | | Anger Emotions | | Distress Emotions | |
|--------------------|------------------|-------------|----------------|-------------|-------------------|---------|
| | γ | t-value | γ | t-value | γ | t-value |
| <i>Analysis 1</i> | | | | | | |
| <u>Predictor</u> | | | | | | |
| Interpretation | 0.26*** | 4.47 | 0.37*** | 4.76 | 0.11* | 2.17 |
| <i>Analysis 2</i> | | | | | | |
| <u>Mediator</u> | | | | | | |
| Interpretation | 0.21** | 3.11 | 0.37*** | 3.95 | -0.00 | -0.06 |
| <u>Predictors</u> | | | | | | |
| Global Avoidance | -0.23** | -3.02 | -0.32** | -2.98 | -0.14* | -2.03 |
| Global Anxiety | 0.14 | 1.87 | 0.06 | 0.60 | 0.21** | 3.31 |
| Specific Avoidance | 0.09 | 1.57 | 0.09 | 1.08 | 0.11* | 2.19 |
| Specific Anxiety | 0.25*** | 4.07 | 0.33*** | 3.81 | 0.16** | 2.86 |

Note ** $p < .01$ *** $p < .001$

The table indicates that event interpretation remained significantly related to anger emotions ($\gamma = 0.37$, $p < .001$) and overall negative emotions ($\gamma = 0.21$, $p < .01$), but not distress emotions. Thus, in line with predictions, event interpretation did not mediate the attachment-distress emotions relationship. Global avoidance and specific anxiety significantly predicted all emotion outcomes but, as anticipated by previous analyses, these effects were not mediated by interpretation. This fact was reinforced by the fact that the γ and t-values for global avoidance and specific anxiety were virtually unchanged by the introduction of the mediator into the current model (c.f. values found in Table 8.9).

The results also showed that interpretation mediated the relationship between global anxiety and overall negative emotions, to a small degree. This was indicated by the change to a non-significant global anxiety γ value (0.14, ns) compared with a previously significant, and slightly higher, value ($\gamma = 0.17$, $p < .05$, see Table 8.9). Finally, formerly significant γ values (Table 8.9) became non-significant for the relationships between specific avoidance and overall negative emotions (0.19, $p < .001$ v 0.09, ns), and specific avoidance and anger emotions (0.26, $p < .001$ v 0.09, ns). Thus, event interpretation at least partially mediated

these relationships, too. Overall, partial support was found for the predicted mediating role of event interpretation.

3.5.1.3 The Four-Stage Mediation of the Relationship Between Supervisor Caregiving and Negative Emotional Reactions

The Independent Effects model posits a 4-variable chain in which supervisor caregiving predicts specific attachment, which in turn predicts event interpretation, which in turn predicts negative emotions. In other words, the relationship between supervisor caregiving and negative emotions is mediated sequentially, first by specific attachment then by event interpretation. Earlier analyses tested the predictor-mediator relationships (supervisor caregiving - specific avoidance/anxiety and supervisor caregiving - event interpretation) and found significant main effects. It remained to test the direct relationships (predictor-DV) between supervisor caregiving and the emotion outcomes, before testing the 4-stage mediating hypothesis.

H5.5 Supervisor caregiving will be directly and negatively related to overall negative emotions, other-focused (anger) emotions, and self-focused (distress) emotions.

Three separate MRC models were estimated, one for each emotion outcome. In each case, supervisor caregiving was the predictor. As can be seen in Table 8.12, supervisor caregiving was significantly and negatively associated with anger emotions ($\gamma = -0.22$, $p < .01$) but the relationship with distress emotions was non-significant ($\gamma = -0.05$, ns). Supervisor caregiving was also significantly and negatively related to the overall negative emotions scale ($\gamma = -0.14$, $p < .01$), and this was probably due largely to the significant association with the anger emotions subscale. The hypothesis was therefore partially supported.

H5.6 The relationship between supervisor caregiving and negative emotion outcomes (except self-focused emotions) will be sequentially mediated by specific attachment (anxiety and avoidance) and event interpretation.

The fact that H5.5 found no direct relationship between supervisor caregiving and distress emotions meant that a mediation effect would not be found through further analysis. Therefore only two MRC models, one for anger emotions and the other for overall negative emotions, were estimated in order to test for mediating effects. In each model, supervisor

caregiving was the predictor, specific anxiety and avoidance were the primary mediators (i.e. first in the theoretical model), and interpretation was the secondary mediator (i.e. second in the theoretical model).

Table 8.12: Results of MRC analysis testing the mediating effects of specific attachment and event interpretation on the relationship between supervisor caregiving and negative emotional reactions (H5.5 and H5.6)

| Variables | <u>Overall Emotions</u> | | <u>Anger Emotions</u> | | <u>Distress Emotions</u> | |
|-----------------------|-------------------------|-------------|-----------------------|-------------|--------------------------|---------|
| | γ | t-value | γ | t-value | γ | t-value |
| <i>Analysis 1</i> | | | | | | |
| <u>Predictor</u> | | | | | | |
| Supervisor Caregiving | -0.14** | -2.82 | -0.22** | -3.17 | -0.05 | -1.36 |
| <i>Analysis 2</i> | | | | | | |
| <u>Mediators</u> | | | | | | |
| Specific Avoidance | 0.08 | 1.30 | 0.02 | 0.24 | | |
| Specific Anxiety | 0.27*** | 4.38 | 0.34*** | 3.84 | | |
| Interpretation | 0.25** | 2.86 | 0.37** | 3.07 | | |
| <u>Predictor</u> | | | | | | |
| Supervisor Caregiving | 0.05 | 0.56 | 0.00 | 0.00 | | |

Note: * $p < .05$ ** $p < .01$ *** $p < .001$

The hypothesis would be supported if a) specific avoidance and specific anxiety became weaker or non-significant predictors of emotion outcomes (because their effects should be mediated by event interpretation); b) event interpretation remained a significant predictor of the emotion outcomes; and c) the relationship between supervisor caregiving and the emotion outcomes was reduced or non-significant (relative to the direct effects shown in Table 8.12, Analysis 1). Table 8.12 presents the results.

Specific anxiety remained significantly associated with all emotion outcomes, instead of becoming reduced or non-significant (see Tables 8.12 and 8.5). This is consistent with an earlier finding that event interpretation did not mediate the specific anxiety – negative emotions relationships (see Table 8.11). In short, no evidence was found for the mediating role of specific anxiety proposed by the theoretical model.

In contrast, Table 8.12 shows that all the requirements for mediation were met for the *supervisor caregiving - specific avoidance - event interpretation - anger emotions* path.

Hence, a formerly significant relationship between specific avoidance and anger emotions became non-significant ($\gamma = 0.19, p < .01$ v $\gamma = 0.02, ns$, see Tables 8.12 and 8.5); event interpretation remained a significant predictor ($\gamma = 0.37, p < .01$); and the formerly significant relationship between supervisor caregiving and anger emotions became non-significant ($\gamma = -0.22, p < .01$ v $\gamma = 0.00, ns$, see Table 8.12, analysis 1 and 2). An identical pattern of results was found for the *supervisor-caregiving – specific avoidance – event interpretation – overall negative emotions* path. The previously significant γ values for the relationship between specific avoidance and overall negative emotions became non-significant ($\gamma = 0.16, p < .001$ v $\gamma = 0.05, ns$, see Tables 8.12 and 8.5); event interpretation significantly predicted overall negative emotions ($\gamma = 0.25, p < .01$); and supervisor caregiving was no longer significantly related to overall negative emotions ($\gamma = -0.14, p < .01$ v $\gamma = 0.05, ns$, see Table 8.12, analysis 1 and 2).

In sum, there were neither main, nor mediated, effects of supervisor caregiving on distress emotions, and specific anxiety did not function as a mediator. However, there was clear evidence of a full 4-stage mediation effect for the *supervisor caregiving – specific avoidance – event interpretation – anger/overall negative emotions* paths. Overall, therefore, partial support was found for the hypothesis.

3.5.2 Interaction Model

The Interaction Model is broadly similar to the Independent Effects Model in that the same sequence of mediation effects is proposed. However, instead of specific and global models having joint (and therefore additive) direct effects on event interpretation, this alternative model posits that global models interact with specific models to moderate interpretation of events. In other words, the way in which events are appraised, by individuals holding negative specific models, may depend on whether their corresponding global models are negative or positive.

H5.7 Global avoidance will moderate the relationship between specific avoidance and interpretation of events.

It was predicted that individuals scoring highly on both dimensions of avoidance would interpret events more negatively compared with individuals who had high scores on only one dimension. To test this hypothesis a model was estimated with terms for the main effects of

the predictor (specific avoidance) and moderator (global avoidance), and a term for the interaction effect (specific avoidance x global avoidance). Event interpretation was the dependent variable. A moderation effect would be found if the interaction term had a significant γ coefficient. Table 8.13 shows the results of the analysis. Consistent with earlier findings, the main effect of specific avoidance was significant. However, there was not a significant interaction between specific and global avoidance in the prediction of event interpretation ($\gamma = 0.01$, ns). Therefore no support was found for the hypothesis.

Table 8.13: Results of MRC analysis testing for moderation effects between specific and global attachment dimensions in the prediction of event interpretation. (H5.7 and H5.8).

| Variables | Interpretation | |
|-----------------------------|----------------|---------|
| | γ | t-value |
| <i>H 5.7</i> | | |
| <u>Main Effects</u> | | |
| Global Avoidance | 0.04 | 0.50 |
| Specific Avoidance | 0.47*** | 8.23 |
| <u>Interaction</u> | | |
| Specific x Global Avoidance | 0.01 | 0.15 |
| <i>H5.8</i> | | |
| <u>Main Effects</u> | | |
| Global Anxiety | 0.41*** | 4.98 |
| Specific Anxiety | -0.12 | -1.63 |
| <u>Interaction</u> | | |
| Specific x Global Anxiety | -0.11 | -1.69 |

Note: * $p < .05$ *** $p < .001$

H5.8 Global anxiety will moderate the relationship between specific anxiety and interpretation of events.

The procedure used to test this hypothesis was identical to that described for H5.7, except that here the main effects concerned specific anxiety (the predictor), and global anxiety (the moderator). The model thus tested for a significant two-way interaction of specific anxiety x global anxiety. In accordance with previous findings of the study, the results in Table 8.13 show that there was a significant main effect for global anxiety, but not for specific anxiety. The interaction effect between the two variables was non-significant ($\gamma = -0.11$, ns).

Taken together, the findings for H5.7 and H5.8 indicate that the global attachment dimensions did not moderate the effects of the specific attachment dimensions in determining event interpretation. In other words, the manner in which specific attachment dimensions influenced the interpretation of supervisors' behaviour was unaffected by individuals' corresponding global attachment dimensions. Given that no support was found for the Interaction Model, no further steps were necessary to compare the alternative models. Partial support was found for the Independent Effects Model, as indicated by some significant main, and mediated, relationships that were in line with the predictions throughout. Therefore, on balance, the Independent Effects Model appeared to provide a better framework for understanding the roles of supervisor caregiving and attachment working models in determining the experience of negative emotions at work.

4. Discussion

This section begins with a summary of the main findings for the study. This is followed by a more in-depth discussion of the key findings as they relate to attachment theory predictions. Some limitations of the study and ideas for future research are also included here, to be discussed further in Chapter 11 (Conclusion), when the wider implications and organisational applications of the research will also be addressed.

4.1 Summary of Main Findings

Study 3 investigated the roles of supervisor caregiving and specific and global attachment working models in determining employees' interpretations of, and emotional reactions to, negative supervisor behaviours. Partial support was found for the hypothesised relationships. In terms of the research questions addressed, the results of the questionnaire survey indicated that:

- Supervisor caregiving predicted specific avoidance and specific anxiety (Q1);
- There was a small-to-moderate degree of overlap between the specific and global attachment constructs (Q2);
- Specific avoidance predicted event interpretation, but specific anxiety did not (Q3);

- Specific avoidance and specific anxiety both predicted anger, distress and overall negative emotional reactions. Specific anxiety was associated with slightly stronger emotional reactions (Q3);
- All four dimensions of specific and global attachment played a role in predicting negative emotional reactions. However, relationship-specific models were the more important predictors of event interpretation, anger emotions, and overall negative emotional reactions. (Q4).

Regarding the final research question (Q5), there was greater support for the Independent Effects Model than for the Interaction Model. According to the Independent Effects Model, supervisor caregiving predicts employees' relationship-specific attachment working models. In turn, specific and global attachment working models independently contribute to the prediction of event interpretation, and this in turn determines negative emotional reactions. Partial support was found for the mediating paths proposed by the model. In particular, in the context of the model, supervisor caregiving, specific avoidance, and global anxiety emerged as the key predictors of interpretation and emotions. There was no evidence of an interaction between specific and global working models in determining event interpretation. Therefore the alternative Interaction Model was not supported.

4.2 Supervisor Caregiving and Specific Working Models

The associations found in Study 2 between supervisor caregiving and specific working models were only partially replicated. Specific avoidance was related strongly and negatively to supervisor caregiving, as before. This supports the proposition that consistently rejecting and insensitive caregiving promotes avoidant working models. The size of the relationship between supervisor caregiving and specific anxiety was relatively weak, as predicted, but unlike the previous study's findings, it was a positive instead of negative association. Does this finding mean that specific anxiety tends to develop in response to high quality supervisor caregiving? This is not the most plausible interpretation given that the study also found specific anxiety was positively related to global anxiety, and more strongly predicted negative emotional reactions compared with specific avoidance. Such findings are consistent with the conceptualisation of specific anxiety as a type of insecure attachment.

Attachment theory suggests that anxious working models develop as a result of inconsistently sensitive and responsive caregiving. However, in relative terms, the caregivers of anxious-ambivalent infants have been found to be more sensitive and responsive than the caregivers of avoidant infants (Ainsworth et al., 1978). For the purposes of the present research, these previous findings were interpreted as indicating that the type of caregiving associated with anxious working models falls, overall, on the negative/insensitive side of a theoretical caregiving continuum. In contrast, the present findings suggest that while supervisors may be inconsistent in the degree of sensitivity and responsiveness afforded their employees (as indicated by the small correlation and MRC coefficients), on balance, their behaviour fell on the positive/sensitive side of the continuum. In other words, the supervisors of anxious individuals were more likely to be perceived as warm, available, and responsive compared with the supervisors of avoidant individuals, but not in all of their interactions, all of the time. Overall, therefore, the fact that the association between specific anxiety and supervisor caregiving was small and positive is still consistent with attachment theory predictions.

An alternative explanation may lie in the nature of the research design. The data were cross-sectional and relied on a common method of collection. Furthermore, as with cross-sectional correlational data, MRC does not provide information about causality nor, more specifically, the direction of causality. Thus, it may be that, inconsistent supervisor caregiving contributed to, and maintained the anxious working model. However, once the mental representation was established, it may be that the anxious individuals did not complete the supervisor caregiving scale according to the actual/observable behaviour of their supervisors. Instead, they may have drawn on the working model as an heuristic and based their responses on the need for approval and fear of rejection, that is inherent in the specific anxiety working model. That is, anxious individuals' preoccupation with the supervisory relationship, characterised by a desire for a closer relationship and an eagerness to please, might have prevented them from making negative comments about their supervisors' behaviours. Consistent with this interpretation, Feeney and Noller (1990) found that anxious-ambivalent individuals tended to idealise their romantic partners when they were interviewed about their relationships. (Note that the same reverse-causality effect could be responsible for the supervisor caregiving - specific avoidance association. However, this would not alter the direction/sign of the observed MRC relationship because avoidance is concerned with generally negative views of the relationship partner.)

In the light of the above explanations, why was a positive association not found between specific anxiety and supervisor caregiving in the previous study, especially given that it too used a cross-sectional survey method? Perhaps the answer lies in differences between the samples for each study. For example, the Study 2 sample was much younger but, more importantly, the survey measured supervisor caregiving and specific anxiety in the context of individuals' experiences of employment-supervision relationships in their first 'real jobs'. The Study 2 sample was chosen precisely because it was anticipated that supervisors' behaviours would be more salient and significant for these individuals compared with more experienced samples of employees. Perhaps the novelty of the situation meant that the respondents were more aware of, and spent more time processing, their experiences of interactions with their supervisors. In turn, this may have enabled the Study 2 respondents to make a clearer distinction between their supervisors' behaviours on the one hand, and generalised beliefs and expectations about their supervisory relationships (i.e. working models) on the other.

We do not have enough information to be able to resolve these issues at this stage. Longitudinal research would be the most appropriate way to disentangle the relationships between supervisor caregiving and specific working models. For example, future researchers could administer the SCS at the beginning of a new supervisory relationship (T1) and see if it predicted specific anxiety (and avoidance) measured at T2, say 6 months later. In the present programme of research, the interviews discussed in Chapter 10 may help to shed some light on the matter, because they were designed to elicit 'real-life' examples of supervisor behaviours. As a whole, the above discussion highlights the fact that caution is necessary in inferring causality from these findings.

4.3 The Relationships Between Specific and Global Working Models

Findings regarding the degree to which specific and global working models are related constructs were broadly in line with expectations. Although there has been relatively little previous research on this issue, the size of the overlap between specific and global anxiety (5%) matched the findings by Pierce and Lydon (2001). A larger overlap in variance was found between specific and global avoidance (16%). However, the zero order correlation of .44 fell within the range (.16 to .46) reported by previous researchers regarding specific-

global working model overlap (e.g. Cozzarelli et al., 2000; Pierce & Lydon, 2001; Smith et al., 1999).

An unexpected finding in the preliminary analysis was a significant correlation (.42) between specific avoidance and global anxiety. It was not expected that these would be so strongly related given that they represent specific models of other and general self-views respectively. The two types of model have previously been found to be empirically orthogonal (Pierce & Lydon, 2001). There are several interpretations of this finding. It may simply be that holding global models of anxiety predisposes individuals to develop avoidant working models in their supervisory relationships. However, Pierce and Lydon (2001) found a stronger tendency for specific models to generalise to global models over time, than vice versa. According to the theoretical framework for the present research, individuals who hold avoidant specific working models have a history of negative relationship experiences with their supervisors. It may be that repeated experiences of rejection and being let down by supervisors erodes employees' sense of global self-worth. Consistent with this, Cozzarelli et al. (2000) found that global anxiety was strongly associated with global self-esteem (while specific anxiety was not), and research on workplace bullying documents how prolonged and aversive working relationship experiences result in lower self-esteem (Randall, 1997).

Another possibility is that responses on the global attachment measure were biased to some degree by the fact that the measure was placed after those concerning the nature of the supervision relationship and specific working models. In addition, even though the global measure stated that it concerned relationships in general, the fact that it was placed in a survey about working relationships with supervisors, may have led respondents to complete the measure with greater reference to their supervisors than would otherwise have been the case. These issues may have combined to inflate the size of the relationship between the constructs. Consistent with this explanation Judd, Smith and Kidder (1991) have demonstrated a powerful biasing effect when questions that are broader in scope are preceded by more focused questions. Also consistent is the fact that small but significant, negative associations were found between global working models and supervisor caregiving in the same study. In contrast, Study 1 found no such significant relationships. Crucially, perhaps, the administration of the survey in Study 1 differed in an important respect from that of the Study 3 survey. In Study 1 the survey was administered in a classroom setting where the researcher was present to give instructions and emphasise that the two measures concerned different

referents (i.e. a particular relationship, versus relationships with others in general). Thus, overall, the presentation of the SCS and specific working model measures before the global attachment measure may have biased responses to reflect the specific (i.e. supervisory) relationship of interest.

More research is needed to assess the precise degree of overlap between specific and global working models in the context of supervisory relationships. Nevertheless, on the basis of the current findings it can be concluded that while specific and global working models are related constructs, they do not overlap to any great extent. Therefore it is certainly not redundant to consider the relative effects of specific and global models in the same theoretical framework.

4.4 Specific Working Models and Event Interpretation

As expected, a positive relationship was found between specific avoidance and negative event interpretation. Thus, consistent with a negative model of other, avoidant individuals reported that they would see their supervisors' actions as symptomatic of the wider relationship and their supervisors' personality. Moreover, they believed they would view the actions as intentional, and would blame their supervisors for the incidents. A positive relationship was also expected for specific anxiety, but it was not in fact significantly associated with event interpretation. This suggests that, unlike avoidant individuals, anxious individuals did not tend to make blame attributions for their supervisor's actions. This does not support previous research suggesting that anxious individuals' transferred/projected negative perceptions of others based on their negative self-views (Mikulincer & Horesh, 1999).

A possible interpretation of the non-significant finding between specific anxiety and event interpretation is that specific anxiety was associated with downplaying the negative aspects of their supervisor's behaviour. Such an explanation is consistent with the positive association between specific anxiety and supervisor caregiving, discussed above, if it is assumed this reflects some form of idealisation of the supervisor, motivated by the goal of closeness. If this is the case, it is interesting that a different pattern was observed for global anxiety. Specifically, global anxiety was, as expected, a significant predictor of negative event interpretation. Previous research (e.g. Simpson, Rholes & Nelligan, 1992; Simpson

Rholes & Phillips, 1996) has shown that global anxiety is associated with a tendency to avoid conflict during interactions with partners, but then to ruminate and express strong negative feelings later on. Thus, it may be that relationship-specific anxiety tapped the immediate response to the situation – avoiding confrontation, motivated by fear of rejection. Conversely, the global anxiety–interpretation association may reflect a more general tendency to harbour grudges over perceived maltreatment by others.

An important caveat is that the event interpretation scale only measured attributions about the supervisor, and not attributions about the self. Given that anxious working models primarily represent the negative views of the self in the relationship, it may be that anxious individuals believed they would have seen themselves as accountable for the incidents, as discussed in Chapter 4. Thus, it is not necessarily the case that specific anxiety was not associated with a particular style of interpretation – it may simply be that it was not picked up by the measure.

4.5 Specific Working Models and Negative Emotional Reactions

Findings were broadly in line with predictions. Specific anxiety accounted for slightly more variance in emotional reactions compared with specific avoidance. This supports existing theory and research indicating that anxiety tends to be associated with more extreme or intense reactions, and avoidant individuals have a tendency to play down the emotional impact of events (e.g. Collins, 1996; Mikulincer & Orbach, 1995). Also as expected, specific anxiety was associated with both self-focused (distress) emotions, and other-focused (anger) emotions. This is consistent with previous studies that have found anxious-ambivalent individuals tend to experience a wider range of emotions in response to a single event (Mikulincer, 1998c; Mikulincer & Orbach, 1995). Effectively, when individuals hold anxious working models of their supervisory relationships it may be that a single event (albeit hypothetical) sparks off associated memories and negative emotions, leading to a spreading of negative affect, as observed by Mikulincer and Orbach (1995).

A finding that did not fully support the predictions was that specific avoidance was associated with both other-focused (anger) and self-focused (distress) emotions to a similar degree. A smaller or non-significant relationship with distress emotions was expected, given that avoidance is meant to reflect denial of emotions that might connote weakness (Consedine

& Magai, 2003), as well as attributions of other-blame but not self-blame (e.g. Collins, 1996). However, this finding may be attributable to the variance shared by specific avoidance and global anxiety, as noted above. In particular, global anxiety strongly predicted distress emotions, and because specific avoidance and global anxiety overlapped to some extent, it could be that the observed specific avoidance-distress emotions relationship was actually explained/accentuated by this overlap. Some support for this explanation is provided by the analysis for H4.6 (the relative contributions of global and specific models to the prediction of negative emotions). Table 8.9 showed that when the effects of global anxiety (and global avoidance) were controlled, the gap in the degree to which specific avoidance predicted distress emotions, compared with anger emotions, became more evident (anger emotions $\gamma = .26$, $p < .001$; distress emotions $\gamma = .11$, $p < .05$). These results are more in line with the predictions, although clearly specific avoidance was still significantly associated with distress emotions.

Another possible explanation for these results may lie in the fact that the sample was almost entirely female. Research in the emotions literature indicates that women are more emotionally aware and more emotionally expressive than men, even when the effects of verbal intelligence are controlled (e.g. Feldman Barrett, Lane, Sechrest & Schwartz, 2000; Kring & Gordon, 1998). In the attachment domain Lopez et al. (1997) did not find the attachment style differences in guilt-proneness (a self-focused emotion) that they had hypothesised. Their sample was largely female, and they suggested that the lack of attachment-related differences was attributable to women being more 'interpersonally sensitive', and therefore more likely to experience self-conscious emotions. Taken together, these findings suggest that the hypothesised denial/suppression of distress emotions by avoidant individuals might be more evident in a gender-balanced sample, but that this effect might disappear when gender was controlled. On the other hand, other attachment researchers have not reported gender x working model effects in relation to emotional experiences (e.g. Collins, 1996; Mikulincer, 1998a; Mikulincer & Orbach, 1995). Clearly, the issue of gender differences in relation to attachment and emotion merits further investigation in future.

4.6 Relative Contributions of Specific and Global Working Models to Event Interpretation and Negative Emotions

Again, the findings were broadly in line with expectations. When the combined influence of anxiety and avoidance was examined, specific working models accounted for 17% variance in negative event interpretation over and above the 10% of variance already accounted for by the global models. The majority of the relationship-specific influence was attributable to specific avoidance because, as discussed above, specific anxiety did not predict blaming the supervisor for her/his actions. In general, these results support previous research indicating that specific models are more important determinants of relationship-level outcomes than global models (Baldwin et al., 1996; Cozzarelli et al., 2000; Pierce & Lydon, 2001).

Together, the specific models accounted for 9% additional variance in anger emotions and 10% additional variance in overall negative emotions. Specific avoidance and anxiety together also accounted for 5% additional variance in distress emotions. However, global anxiety made a much greater contribution (13% variance), so this was not significant. Thus there was partial support for the prediction that specific models would be more important predictors of emotion outcomes in the relevant relationship domain. The strong distress emotions-global anxiety association is consistent with previous research on global attachment and emotions. Collins (1996) and Pierce and Lydon (2001) also found that global models of anxiety remained a strong influence on relational and emotional outcomes in specific relationships. Global anxiety is associated with a negative model of the self in relationships in general. As discussed in the literature review, Collins and Read (1994) speculated that, compared with models of other, the model of self may be less flexible or slower to be adapted in specific relationships, since it relies on achieving changes in self-image and self-esteem within the relationship. As such, the more permanent global model of self may remain as the more influential model in matters that affect the self-construct. Thus, in the present study, people scoring highly on global anxiety may have been predisposed to react with feelings of guilt, embarrassment etc. in the face of their supervisor's negative actions because of their over-arching negative self-image, and therefore self-blaming, tendencies. Their relationship-specific models of self made a smaller, but nevertheless congruent, impact in comparison.

The fact that global avoidance *negatively* predicted the emotional outcomes is interesting. Such a finding seems to represent a denial of any negative emotions in response to their supervisors' negative actions. This supports previous theory and research that has suggested that global avoidant individuals may attempt to deny or suppress their emotions (e.g. Kobak & Sceery, 1988; Mikulincer & Orbach, 1995). More typically, however, this relationship is manifested by a weaker relationship with emotional outcomes compared with anxious individuals (e.g. Collins, 1996), as was found for specific avoidance in the present study. The present findings are especially interesting given that there was also evidence that globally avoidant individuals tended to blame their supervisors for their actions. To blame the perpetrator, but not experience the other-focused, anger-related emotions theoretically associated with such attributions, is congruent with denial or playing down the impact of the relationship incidents.

The differential pattern of associations found between the specific and global models in relation to interpretation and emotion is important because it implies that specific models may not simply have 'identical but stronger' effects compared to their global counterparts, as had been predicted at the outset. The present findings are perhaps more consistent with the view that specific models play a key role in guiding immediate responses to interpersonal incidents occurring within the relevant relationship domain. The global models may tell us more about the additional - 'similar-but-different' - background effects of people's general beliefs and expectations about relationships. This supports the assertion of Pierce and Lydon (2001) that attachment operates as both a relationship construct (specific models) and an individual difference construct (global models), but adds greater complexity to the picture than had hitherto been suggested. Overall, these findings suggest that both specific and global working models make a valuable contribution to our understanding of the ways in which supervisor's actions are interpreted and responded to emotionally. Both are important to take into account.

4.7 Modelling the Relationships Between Supervisor Caregiving, Attachment Working Models, and Negative Emotions in Supervisory Relationships

No support was found for the Interaction Model. Global working models did not affect the way that specific models influenced event interpretation. So, for example, there was no evidence that individuals interpreted the scenarios more negatively when they held negative beliefs about self and other in relationships in general (global models), as well as in the

supervisory relationship (specific models). This does not support the findings of Pierce and Lydon (2001) who found that global anxiety moderated the impact of specific anxiety. Further research is needed to clarify this issue.

Partial support was found for the Independent Effects Model. The clearest support was found for the paths linking supervisor caregiving with anger emotions and overall negative emotions. Supervisor caregiving had a small direct effect on these emotional reactions, but in line with the theory, this effect was mediated by / acted through specific avoidance and event interpretation. Thus, the evidence can be interpreted as showing that: poor supervisor caregiving (i.e. lack of warmth, responsiveness and sensitivity) predicted negative models of other (avoidance) in employees' relationships with their supervisors. Avoidant models are characterised by lack of trust and avoidance of closeness or dependence in the working relationship. Thus, when supervisors behaved negatively in an attachment-relevant situation, it may be the attachment system was activated, and individuals drew on their avoidant relationship-specific models to attribute cause and blame for the incidents to their supervisors (e.g. 'just the kind of thing I'd expect from her/him'). In turn, these attributions predicted other-focused, anger-related emotional reactions, and negative emotions overall.

A similar pattern was found for the effects of global anxiety. Global anxiety predicted negative interpretation of events, and this in turn was associated with overall negative emotions. Individuals who held a negative model of self for relationships in general may have believed that their supervisors deserved blame for the situation because, by being insensitive and unresponsive at a time of need, they threatened the individuals' goal of closeness and 'being liked' in *all* relationships. This finding is also consistent with research suggesting that negative other-views may be a consequence of anxious individuals projecting their own insecurities and negative traits on to the relationship other (c.f. Mikulincer & Horesh, 1999). In turn the negative evaluations were associated with the experience of negative emotions, as predicted by the Independent Effects model.

There were direct effects on emotional reactions by specific anxiety and global avoidance, but no indirect/mediated effects were found. After controlling for event interpretation, global avoidance remained significantly and negatively associated with all emotion outcomes, and specific anxiety remained significantly and positively associated with emotional reactions. The fact that these effects did not appear to be mediated by event

interpretation is consistent with proposed direct effects of attachment working models on emotional reactions. That is, working model activation may have led to the operation of automatic affect regulation strategies such that the hypothetical events were reacted to in characteristic ways, without additional cognitive processing (c.f. Collins & Read, 1994; Collins, 1996).

Alternatively, or additionally, it may be that other kinds of attributions or appraisals underlie the observed relationships, in addition to the attributions of cause and blame directed at the supervisor that were the focus of the study. Based on the current data, it is not possible to ascertain the extent to which the findings reflect automatic affect regulation strategies, or interpretive biases. In future, research should adopt a more sophisticated measure of event interpretation that incorporates self-directed and external attributions (i.e. caused by circumstances beyond anyone's control). This should provide a fuller picture of the direct and indirect links between working models, cognition, and the different types of negative emotions.

Finally, supervisor caregiving was directly associated with anger emotions, but not distress emotions. Based on Affective Events theory (Weiss & Cropanzano, 1996) a link between supervisor caregiving and distress emotions was expected. For example, AET suggests that the likelihood of supervisors behaving in a way that leads to negative emotions in general should be greater if supervisors are generally perceived as interpersonally rejecting or inconsistent. In contrast, the current findings suggest that internal, attachment-related interpretive processes, as opposed to external factors, may be more important in determining the experience of distress emotions. Indeed, Lewis (2000) emphasises that self-conscious emotions (e.g. guilt, shame, embarrassment), unlike other types of emotions (e.g. other-focused), tend to result from 'cognitive events' that need not be closely tied to externally observable events. Consistent with this, event interpretation (i.e. negative attributions about the supervisor) did not predict/mediate distress emotions. This suggests that, as hypothesised, self-focused emotions may stem from attributions of self-blame, not other-blame.

4.8 Caveats and Limitations

The discussion has highlighted that the cross-sectional nature of the research design, and the ordering of scales in the questionnaire, mean that caution is necessary in interpreting both

the size and direction of relationships. In addition, the mainly female sample may have influenced the findings regarding type and intensity of emotional reactions. This may have implications for the generalisability of the findings to the wider population. Another key limitation of the study is the fact that conclusions are based on imagined reactions to hypothetical scenarios. An advantage of the method is that the scenarios were standardised and thus enabled direct comparison of individuals' reported reactions. It is also encouraging that the findings broadly supported the hypothesised relationships. Nevertheless, it is important to bear in mind that people may not respond to real-life situations in the way that they say (or think) they would. Finally, because the study did not measure attributions of self-blame, only a partial picture of the relationships between working models, cognition and emotions was obtained. However, the role of this stage of the research was to gather preliminary empirical evidence concerning the proposed research models. It was then intended that the issues raised could be followed up in greater depth during the subsequent interview phase of the research.

5. Summary

Keeping in mind these caveats, it is possible to build a tentative picture of employees' experiences of negative emotions in their supervisory relationships. In broad terms, it appears that, when employees repeatedly experience rejecting or insensitive care from their supervisors, they may develop avoidant working models of the supervisory relationship, in which the supervisor is viewed as untrustworthy and unreliable. Holding such negative views of the supervisor means that ambiguous or negative supervisor behaviours may be interpreted in the most negative light, which in turn is associated with negative emotional reactions, especially anger-related emotions. When supervisors are relatively more sensitive and responsive, but not consistently so, employees may instead develop anxious working models characterised by a preoccupation with issues of closeness and approval in the supervisory relationship. These concerns may lead anxious individuals to withhold judgement of their supervisors when they behave in a negative/ambiguous manner. They may also see themselves as responsible for the events. Regardless of interpretation, anxious individuals appear to experience more intense negative emotional reactions (both anger and distress) compared with their avoidant counterparts.

The weight of evidence from Study 3 also suggests that both global and specific working models play key roles in determining the ways in which relationship events are interpreted and responded to emotionally. The findings indicated that the respective effects of specific models and their global counterparts are not necessarily symmetrical, or equivalent. In general, it appears that specific models are most influential in guiding immediate, relationship-specific interpretations and emotional reactions, while global models provide additional, background input based on more general relationship experiences and expectations. Overall, global anxiety appears to exert a stronger influence than global avoidance in determining relationship-specific cognition and emotions. The effects of specific and global models appear to be relatively independent, rather than interactive. Thus, in theory, a given individual's reactions to a relationship event could be determined (at least in part) through knowledge about her/his relationship-specific and global working models. Note, however, that the effects are not strictly speaking independent (and therefore additive) because the constructs overlap slightly.

In sum, broad support was found for the hypotheses guiding the research, but it is clear that the relationships between variables are complex and require further research to begin to unravel them. As a first step towards a better understanding of how supervisor caregiving and *specific* working models influence event interpretation and negative emotions, the next stage of the research conducted follow-up interviews with nurses from the present study. The next two chapters present the method and results of this research.

This chapter describes the methods used in conducting Study 4, the semi-structured interviews. First, the aim and research questions for the study are reviewed. The selection of the sample and sample characteristics are then outlined. The next section presents the procedure for the study, specifying how the interviews were conducted. Following this, the design of the interviews is discussed. The chapter ends with a section describing the coding and analysis of the interview material.

1. Aim and Research Questions

1.1 Aim

Study 3 was designed as an empirical test of the proposed effects of supervisor caregiving and attachment (specific and global) on employees' cognitive and emotional reactions in their supervisory relationships. The findings broadly supported the theory. Supervisor caregiving predicted specific working models and, relative to global models, specific models were the more important predictors of event interpretation and intensity of overall negative emotions. A limitation of the study is that it investigated only imagined reactions to hypothetical negative employee-supervisor interactions. The present study sought to address this issue by focusing on the differing 'real-life' relational experiences of employees with different specific working models. Specifically, the aim of the present study was to:

- Obtain an in-depth, qualitative, understanding of the roles of supervisor caregiving, and specific attachment working models, in employees' 'real-life' experiences of negative emotions in their supervisory relationships.

1.2 Research Questions

There were two main research questions:

1. How do employees with different supervisor-specific attachment working models describe and evaluate their working relationships with their supervisors?
2. In what ways are differences in specific working models associated with:

- a) The frequency and nature of 'real-life' negative interpersonal events experienced by employees in their supervisory relationships?
- b) The cognitive, emotional, and relationship outcomes of 'real-life' negative interpersonal events?

Note that this study required treating attachment as a categorical, rather than dimensional variable. Dimensions provide greater accuracy in quantitative research, but it was believed that categorisation would be more useful for understanding the effects of each dimension qualitatively. Additionally, in keeping with the categorical conceptualisation of attachment, a secure category was included. This was in order to provide a baseline against which to interpret the effects of the insecure models.

2. Sample

2.1 Sample Selection

Individuals were categorised according to whether they had predominantly secure, avoidant, or anxious working models of their supervisory relationships. First, the mean scores on specific avoidance and specific anxiety were listed for all individuals who completed the survey in Study 3 (N=183). Next, the median score for each attachment dimension was calculated. Individuals were then classified as having a predominantly anxious working model if they scored above the median on anxiety, and had mean scores among the lowest 25% on the avoidance dimension. Conversely, individuals were assigned to the avoidant category if they scored above the median on the avoidance dimension, but among the lowest 25% on the anxiety sub-scale. Finally, individuals who had scores in the lowest 25% on both dimensions were classified as having secure working models of their supervisory relationships. A sampling pool of 60 nurses was generated in this way – 20 in each attachment group. Care was taken to ensure that the proportions of individuals drawn from the two sites of the Trust were equivalent to the 60%-40% split found in the main sample.

At this stage of the selection process, individuals were identifiable only by their case numbers. In order to prevent possible interviewer bias, stemming from prior knowledge of an individuals' working model, steps were taken to ensure that the researcher remained 'blind' in this regard. Hence, the researcher instructed a colleague to:

- Match each case number with the correct name and ward
- Assign the names as appropriate to one of three separate lists (one for each working model)
- Return the three lists, unlabelled, to the researcher (i.e. with no information regarding which list related to which type of working model)

Thus, the researcher needed only to recruit approximately equal numbers of interviewees from each list in order to meet the sampling requirements.

All 60 of the listed individuals were sent a letter of approach, inviting them to participate in the follow-up study for the survey, “Working Relationships in the NHS”. The letter stated that individuals had been randomly selected to take part in the next phase of the research programme. Details of dates and venues for the interviews were provided. The letter stressed confidentiality for participants, and offered a £15 book/music voucher in return for their involvement in the research. A detachable reply sheet and a reply-paid envelope were included so that individuals could indicate whether they were able to participate, and provide their contact details. Individuals were asked to respond to the approach letter within two weeks of its receipt. (See appendix 12 for a copy of the letter.)

The target sample size was 30 individuals – ten per group. Fifteen affirmative replies had been received by the deadline. These people were contacted by their stated preferred method (e.g. e-mail, mobile phone etc.), and a date and time was arranged for their interviews. In order to boost the sample size further, the researcher gained permission from the Associate Director of Nursing to follow up the letters with telephone calls to the non-respondents. At the researcher’s request, the organisation provided direct-line telephone numbers for the wards in which the target individuals worked. In this way, it was possible to prevent the Trust from discovering the names of the selected individuals – a fact that was useful in reassuring potential interviewees about confidentiality. This was especially important given the potentially sensitive topic of the interviews.

The researcher attempted to contact every individual who had not responded to the original letter. Some individuals had left the organisation or moved to another ward, so they were removed from the list. The remaining individuals were called and invited to participate in the research. The contents of the approach letter formed the protocol for the telephone calls. If individuals agreed to participate, a convenient time was arranged for the interview. Following

the successful recruitment of an interviewee, the researcher sent a letter to the individual confirming the arrangements.

2.2 Sample Characteristics

The final sample comprised 24 nurses. Of these, 7 individuals were classified as having secure working models of their supervisory relationships (6 female, 1 male); 8 individuals belonged to the anxious working model group (7 female, 1 male); and 9 individuals held avoidant working models of their relationships with their supervisors (8 female, 1 male). 15 (63%) of interviewees were employed at Site 1, and 9 (38%) worked at Site 2. This is broadly equivalent to the 59% and 41% of individuals employed at Sites 1 and 2 respectively in the Study 3 sample. Each individual worked in a different ward, and therefore had a different ward manager/supervisor. Within each working model sub-group, E, F, and G grades were represented, as were both full- and part-time workers. Length of supervisory relationship at the time of interviewing ranged from 9 months to 12 years. Overall, the sample appeared to be demographically representative of the main sample from which it was drawn.

3. Procedure

Interviews were conducted over a four-week period, approximately three months after the Study 3 survey was conducted. The researcher interviewed nurses at both of the Trust sites during alternate weeks (i.e. Site 1 in weeks 1 and 3, Site 2 in weeks 2 and 4). At each site, interviews took place in a specially booked meetings room, in a location that was separate from the hospital ward buildings. It was important to conduct the interviews away from nurses' everyday workplaces because interviewees are more likely to feel comfortable and less inhibited talking about sensitive issues in a neutral setting (Seidman, 1998).

Before commencing the interviews, the researcher talked through the research and its related ethical issues in order to verify that interviewees gave their informed consent to participation. Appendix 13 contains the notes that were used to standardise this introduction. Briefly, the researcher outlined the structure and purpose of the interviews, stating that she was interested in 'how working relationships with managers/ supervisors affect the way people feel at work'. Participants were told that any information they gave would be completely confidential - it would be impossible to identify anyone from the way the material was reported, either to the

organisation, or in the final thesis. The researcher also stated that she neither knew, nor needed to know, the supervisors' names, so interviewees could choose to use false names for them if they wished to further protect confidentiality.

In addition, given the potential for the topic under investigation to be distressing for some individuals, the researcher was ethically bound to protect the participants' well-being. This issue, and how best to address it, had been discussed with the Director of Nursing and the Management Development Advisor during access negotiation. As a result, the researcher was able to obtain the names and contact details of individuals within the organisation who could provide independent support and advice in the event of interviewees experiencing distress as a result of the interview. Interviewees were given an information sheet with these details before the interview began.

Finally, interviewees were asked if they would be comfortable having the conversation recorded, since this was the best way to obtain an accurate record of the interview. It was stressed that the tapes would be the sole property of the researcher; they would be labelled with a case number known only to the researcher, and they would be kept in locked filing cabinet.

Following this introduction, the researcher checked whether the interviewees required further information about any aspect of the research, and asked if they were still happy to proceed. All participants were happy to continue with the interview, and all were comfortable with the proceedings being tape-recorded. Interviews lasted approximately 45 minutes. At the conclusion of the interview, the researcher thanked the interviewees for participating and gave them their gift vouchers.

4. Interviews

4.1 Piloting the Interview Guide

Prior to undertaking Study 4, the interview schedule was piloted. The aim of the exercise was to find out whether the interview guide was useful for eliciting the required depth and quality of information. It was also important to time the interviews. Interviewees had been promised that the entire process (including introductory and closing conversations) would take no longer than one hour. Therefore, the duration of the interview could not exceed 50 minutes.

Two nurses, who were not part of the sample, were recruited for the pilot. The researcher followed the interview guide and then asked the interviewees to comment on how they had found the interview experience. Of particular concern was whether any questions were difficult to answer or ambiguous. Based on the nurses' comments, and notes taken during the interviews, it was concluded that the interview guide did not require any adjustments before conducting the study.

4.2 Interview Design and Procedure

The interviews were semi-structured, approximately following a standard interview schedule (see appendix 14 for a copy of the interview guide). Because the topic of supervisory relationships is potentially sensitive, especially for individuals who have had less good relationship experiences, it was important to put interviewees at ease and try to develop rapport before focusing the on the key areas of research interest (King, 1994; Seidman, 1998). Therefore, the interview opened with straightforward background questions about the interviewees' job history and current role, before moving on to some general questions about length of supervisory relationship and average degree of contact with the supervisor in a given week.

Following the warm-up questions, the main body of the interview was designed to address the two research questions. Thus, to address the first research question, interviewees were asked to describe, in detail, the nature of their working relationships with their supervisors. Of particular interest were interviewees' descriptions of supervisor caregiving behaviour. This concept was never mentioned, in order to avoid biasing interviewees' responses. However, the researcher used *ad hoc* prompts and open, probing questions to pursue relevant avenues as the interviews unfolded (c.f. King, 1994). Also pertinent to interviewees' descriptions and evaluations of their supervisory relationships were questions about the impact of the relationships on how individuals felt when they were at work, and their expectations for the future of their relationships.

The second research question concerns the frequency, nature, and consequences of negative interpersonal events between employees and their supervisors. This question was investigated using an approach based on the Critical Incident Technique (Flanagan, 1954). The critical incident technique (CIT) is a qualitative interview procedure that 'facilitates the

investigation of significant occurrences (events, incidents, processes, or issues) identified by the respondent, the way they are managed, and the outcomes in terms of perceived effects' (Chell, 1998: p56). CIT was considered the most appropriate method for investigating the links between attachment working models, events, and cognitive, affective, and relationship outcomes because it offers the following advantages over less structured interview techniques:

- Provision of a clearer picture of the link between context and outcomes
- Facilitation of the search for patterns, and cross-comparison of incidents between groups (Chell, 1998).

Interviewees were thus asked to recall and describe in as much detail as possible:

- An occasion in the past 12 months when 'your ward manager said or did something to you that made you experience negative emotions' (i.e. an event)
- Why they thought their supervisor behaved in that way (i.e. attributions)
- How they felt at the time (i.e. emotions)
- The longer-term interpersonal impact of the event (i.e. relationship consequences)

Where necessary, the researcher asked probing, open questions (e.g. 'what', 'how', 'why') to enhance understanding of the incident. Following recounting of an incident, interviewees were asked if they could recall and describe any additional incidents, using the same procedure.

5. Coding and Analysis

All of the interviews were fully transcribed by the researcher. The transcripts were then analysed using template analysis (King, 1998). Essentially, template analysis is a thematic analysis of qualitative data using a defined coding scheme (template). The coding scheme is developed partly *a priori*, and partly from themes that emerge from the data (King, 1998). The process of reducing, categorising, and grouping interview data in to coded chunks enables a more systematic investigation of the research questions (Miles & Huberman, 1994)

5.1 Coding

Drawing upon the guidelines outlined by King (1998) and Miles and Huberman (1994), the transcripts were first read through without annotating. This reading, together with the main interview questions, the research hypotheses, and variables used in Study 3, formed the basis for

the development of a preliminary list of codes (i.e. labels representing themes in the text). For example, the codes encapsulating employees' descriptions of their supervisory caregiving experiences were derived from the eight aspects of supervisor caregiving identified in the literature and incorporated in to the Supervisor Caregiving Scale. Similarly, the codes relating to attributions for events were based on the Relationship Attribution Measure dimensions used in Study 3 (Fincham & Bradbury, 1992).

Using this initial coding scheme, the researcher worked systematically through the full set of transcripts. The transcripts were coded manually at this stage, using a combination of coloured highlighter pens and hand-written annotation. It was decided to code manually because the transcripts were relatively brief (12 pages on average), and the research questions did not require a complex hierarchy of inter-related codes. Furthermore, as Coffrey and Atkinson (1996) note: 'the importance of the [analytic] work lies in how we use the coding and concepts, not in whether we use computer software to record them or rely on manual ways of marking and manipulating the data.' (p. 27).

Sections of text that were relevant to the research questions and hypotheses were identified and labelled with the appropriate code from the coding scheme. This process highlighted some shortcomings in the preliminary coding scheme, and amendments were made to the template accordingly. For example, it became apparent that the code 'acceptance', a sub-category of supervisor caregiving, was too large and all-encompassing on its own. Therefore, it was subdivided into four further codes: 'warmth and friendliness', 'exclusion/cliqeyness' and 'criticism' and 'disapproval'. By employing this flexible approach, the coding scheme was gradually refined in order to better represent the themes in the data. Note that any changes made to the template required returning to previous transcripts and amending the coding as appropriate. Thus, the coding process was iterative, and each transcript was re-visited several times before coding was complete. Table 9.1 shows the final version of the coding scheme.

Table 9.1: *Final template used in coding Study 4 interview data*

1. Description and evaluation of supervisory relationship

- Overall evaluation
- Supervisor Caregiving
 - Awareness
 - Understanding
 - Acceptance-rejection
 - Warmth/friendliness
 - Exclusion/cliqeyiness
 - Criticism
 - Disapproval
 - Accessibility
 - Physical (availability/visibility)
 - Psychological (approachability/listening)
 - Promptness
 - Appropriateness (including confidentiality)
 - Collaboration-interference
 - Consistency
- Relationship impact
 - Use of supervisor as safe haven
 - Behaviour/ feelings at work
 - Attitudes towards supervisor
- Expectations for future of relationship

2a. Negative interpersonal events

- Event frequency
- Nature of events
 - Event content
 - Proximity-seeking abandonment /rejection
 - Performance-related criticism / interference
 - Other
 - Attachment themes
 - Trust
 - Independence
 - Closeness
 - Approval

2b. Event outcomes

- Interpretation (attributions)
 - Locus/agent (self / other)
 - Internal-external
 - Stability
 - Intentionality
 - Motivation
 - Blame (self / other)
- Negative Emotions
 - Other-directed
 - Self-directed
- Relationship consequences
 - Short-term
 - Longer-term

5.2 Coding Reliability

Unlike the interviewing, the coding process was not blind. The transcripts were grouped together to facilitate identifying themes that were relevant to developing the coding scheme. It was therefore important to check the internal reliability of the coding, to make sure that knowledge of attachment working model had not biased interpretation and therefore coding. Following the recommendations of Miles and Huberman (1994), the internal consistency of the coding process was assessed in terms of both inter-rater reliability and intra-rater reliability:

Inter-rater reliability – in order to check that another rater would code the data in a similar way to the researcher, a second rater (an organisational researcher with qualitative analysis experience) coded a randomly selected transcript using the final coding scheme. This rater was not aware of the interviewees' working model. The transcript was then compared with the researcher's own coded copy of the same transcript. Reliability was calculated using the formula: $\text{reliability} = \text{number of agreements} / (\text{total number of agreements} + \text{disagreements})$. Inter-rater reliability was 72%. Based on these results, it was concluded that, while there was some room for improvement in inter-rater reliability, it was sufficiently high to suggest that attachment group bias had not affected coding.

Intra-rater reliability – According to Miles and Huberman (1994), it is especially important that solo researchers achieve good intra-rater consistency (i.e. above 80%). To check the researcher's own coding consistency, she re-coded an unmarked copy of a transcript that had been coded a few days before. Reliability was assessed by comparing the two copies. Using the formula above, code-recode reliability was 90%. As a final consistency check, all transcripts were reviewed once more against the final coding scheme.

Overall, the coding was judged to be sufficiently reliable for the purposes of the research.

5.3 Interpretation

Having confirmed the reliability of the coding, the final step was to interpret the coded material in order to address the research questions. The focus of the analysis was on differences between the accounts of individuals with secure, avoidant, and anxious working models. To facilitate this process, three folders were created in Microsoft Word – one for each working

model group. Within each folder a file was created for every code. Then, working through each (hard copy) transcript, sections of coded text were located in the corresponding electronic copy, and copied and pasted in to the appropriate folder and code file. Finally, these documents were printed, enabling the cross-comparison of themes (i.e. codes) between groups. Specifically, the researcher sought to identify and summarise the similarities within groups, and the contrasts between the groups.

To summarise, this chapter has described the procedures by which the interviews in Study 4 were designed, conducted, and analysed. The next chapter will present the qualitative results.

Chapter 10: Interview Results and Discussion

This chapter presents the findings and discussion for the interviews conducted in Study 4. The overall aim of the study was to attain an in-depth, qualitative, understanding of the roles of supervisor caregiving, and specific attachment working models, in employees' 'real-life' experiences of negative emotions in their supervisory relationships. The chapter is divided into three sections. The first section explores how perceived quality of supervisor caregiving differs between individuals with secure, avoidant, and anxious specific working models (Q1). The next section examines the relationships between specific working models and the nature of negative interpersonal events occurring in the supervisory relationship (Q2a). Also presented in this section are the cognitive, emotional, and relationship outcomes associated with the events (Q2b). The chapter concludes with a summary and discussion of the findings. Note that throughout the chapter, all references to supervisor caregiving refer to interviewees' descriptions and perceptions of their supervisors' behaviour. However, to aid readability, this may not always be stated explicitly.

1. Relationship Characteristics

1. How do employees with different supervisor-specific attachment working models describe and evaluate their working relationships with their supervisors?

The results for this research question are discussed below, taking each category of specific working model in turn. Within each group, the research predictions are briefly recapped. The findings are then presented in four sub-sections:

- Overall evaluation of the relationship
- Supervisor caregiving
- Relationship impact
- Expectations about the future of the relationship

1.1 Secure Working Models

It was anticipated that, overall, individuals with secure working models would be satisfied with their supervisory relationships. They were expected to describe their

supervisors as providing high quality caregiving. In terms of relationship impact, secure individuals were not expected to show any signs of preoccupation with unmet attachment needs, and they should be therefore be content for the relationship to continue unchanged.

1.1.1 Overall Evaluation of the Relationship

Nurses with secure working models summarised the quality of their working relationships with their supervisors as ‘good’ or ‘very good’, and reported that they ‘get on very well’ with them. While such an evaluation would be expected to incorporate other aspects of the relationship not encompassed by the caregiving construct (e.g. support for innovation), it was clear that supervisor caregiving was indeed a key factor. Specifically, interviewees from all groups tended to link relationship quality with the extent to which they could rely upon their supervisors as a safe haven (i.e. someone to turn to for help in times of need). The following is a typical response from a nurse with a secure working model:

[It’s] very good. Yeah, I know if I had any concerns I could go to her.

An additional feature of secure nurses’ assessments of their supervisory relationships was that they described the relationship in *balanced* terms. They did not idealise the relationship; instead they acknowledged that their supervisors were ‘only human’ and occasional interpersonal blips were therefore bound to occur:

The good points far outweigh the bad points. I don’t want you thinking I’m being a Moaning Minny here – there is no working area, no matter what profession you work in that everything is sweet and dandy. You take the rough with the smooth, the good with the bad. And... we do have a very good working relationship. Yeah, there are a few minor bits and pieces, but you’ll get that with any relationship.

1.1.2 Supervisor Caregiving

Awareness - the majority of nurses reported that they worked under stressful conditions, on wards that were often understaffed and overloaded. In addition to the daily routines associated with organising and administering patient care, many spoke of the constant pressure to find beds for newly admitted patients, or meet targets for surgery. Against this backdrop, nurses with secure working models described supervisors who were genuinely concerned for their well-being and tuned-in to their feelings. In particular, these supervisors

were aware of the potentially negative impact of the stressful working conditions on individual well-being, and the 'morale' of the staff as a whole. Consistent with the caregiving literature, secure nurses' supervisors were not only vigilant and perceptive regarding changes in employees' well-being, they also demonstrated, and actively maintained, their awareness by taking time to talk to their employees and find out how they were feeling:

She always makes sure that the staff on the ward are really *happy* in the sense of if there's a problem she doesn't want them to keep it to themselves. She'd rather it's discussed, you know what I mean? Rather than bottle anything up, you know?

Appropriateness - Having ascertained that an individual was experiencing some kind of difficulty, be it of a work or a personal nature, the supervisors of secure individuals would try to help in a suitable manner. The following quote illustrates the interrelationship between awareness and appropriateness of supervisor caregiving as experienced by secure nurses:

She picks up if you're not feeling too good. She will notice things and ask you 'is there a problem', and she tries if possible to remedy the situation. So sometimes if you're just feeling tired and worn out, there's nothing you can do about it, but it does help.

Note that the quote suggests that the awareness component of her supervisors' caregiving behaviour was a source of support *per se* – it was enough that the supervisor showed she was aware of the individuals feelings and had shown a genuine interest, even if nothing could be done to alleviate the problem.

Across the whole sample of interviewees, a key element of responding appropriately to individuals' problems was the degree to which supervisors treated concerns discreetly and confidentially. Because most nursing is performed in the open ward, nurses were sensitised to the inappropriateness of dealing with personal issues within earshot of both staff and patients. The quality of the caregiving relationship was therefore judged in part according to this criterion. Nurses with secure working models reported that their supervisors respected confidentiality and acted appropriately when personal issues were discussed, including conducting sensitive conversations in private:

If we have any issues, we're in the office, and we discuss them like two professionals, like two adults.

Acceptance and Psychological Accessibility - nurses with secure working models described their supervisors as 'friendly' and 'approachable'. Supervisors ensured that all employees were treated in the same welcoming and inclusive manner. In particular, nurses commented that their supervisors did not have 'favourites' among the staff. The interpersonal warmth and sociability of these supervisors helped nurses to feel that they were accepted for themselves as individuals, as well as a part of the work group:

Whether you're a newcomer or somebody she's known for a long time she'll make you feel welcome, do you know? And that sort of puts you at ease'

Supervisors who exhibited a friendly and accepting interpersonal style also tended to be perceived as psychologically available. That is, employees felt that they could turn to their supervisors in times of need and they would be listened to sympathetically, without fear of criticism or rejection:

She's very easy to approach, and I think in that respect, because she's easy to talk to and get on with... if there's a problem you know you're not afraid to discuss it with her. You know, whether it's good or bad, you just approach her.

Physical Accessibility and Promptness – the supervisors of nurses with secure working models were not simply 'there' for employees in a psychological sense, they were also physically present and readily accessible. These supervisors tended to be highly visible on the ward, rather than closeted away in the office. They would 'muck in' clinically if and when it was appropriate to do so. Such visibility contributed to the sense that, should any problems arise, supervisors could easily be contacted or approached for assistance. Once an employee had signalled the need for help, secure nurses' supervisors were quick to respond. If they could not see the individual immediately, they would arrange a convenient time as soon as possible thereafter. In caregiving terminology, these supervisors' ensured that their responses were contingent with their employees' distress signals:

The manager we've got now, she's always there, or always around anyway. I mean I know if I needed her for something I'd know when to phone to get her. But try and get hold of the [previous] one – you could take two or three weeks to try and track her down (laugh). And then you'd get all sorts of promises like, oh, yes she'd phone you back, or she'll get in touch and that, and she wouldn't for weeks. But I mean at least this one, if I needed her I know I could get hold of her probably within twenty-four hours at the most.

Or as another nurse remarked:

If I want to speak to her I just go 'Oy! Can I come and chat to you now?' And if she can't do it then she'll say come back in an hour's time and she'll make time for you.

Understanding – Nurses with secure working models indicated that their supervisors demonstrated an understanding of their needs and concerns. This was especially the case concerning the work-home interface. For example, supervisors were described as 'understanding' and 'accommodating' when nurses needed flexibility in their shift patterns in order to cope with child care demands, or changing family circumstances. The ability to see things from the individual's perspective, rather than focusing on the implications of the individual's problems for the supervisor's own role is illustrated by the following example:

She's very understanding... I had an operation last year and I needed to take some time off sick, and she was very supportive and told me not to come back too early, and make sure I'm well... very caring as well.

Collaboration – Nurses with secure working models tended to describe their supervisors as adopting a collaborative approach to helping them when they turned to their supervisors for help or advice. Specifically, supervisors took into account the opinions and wishes of the individuals, and they worked together to resolve problems through a process of open discussion. The same applied to dealing with both work and personal issues. Consistent with the notion of collaborative effort, nurses emphasised that these sessions often resulted in agreeing a 'compromise' course of action. The quote below is representative of problem solving as a two-way process in which the supervisor was open to the individual's perspective:

We'll discuss whatever [work problems], and she will often say to me 'well, if you feel that's necessary then we'll go for it'. If she says to me 'well, I don't really think we should go in that direction', you know, I'll respect her opinion, her view... she doesn't pooh-pooh ideas... we tend to bounce ideas off each other.

Consistency – The supervisors of nurses with secure models were consistent in the way they treated individuals. Thus, as the preceding discussion demonstrated, these supervisors provided high quality caregiving and crucially this was *without exception*. Typical comments were:

She's not moody. No. Not hormonal (laugh).

I haven't found her any different from when she started. She's just always been the same.

Supervisors generally did not allow 'bad days' or 'moodiness' to affect the way they responded to their staff. On the very rare occasions this did occur, the supervisors were quick to apologise and give an account of their actions. This overall predictability of supervisory behaviour may have contributed to nurses' perceptions that they could be confident of a positive reception whenever they needed to approach their supervisors, for whatever purpose.

1.1.3 Relationship Impact

All interviewees were asked whether they saw any connections between the nature of the relationships they had with their supervisors, and the way they felt 'in themselves' when they were at work. From the accounts of nurses with secure working models a clear trend emerged: when individuals believed that their supervisors were 'there' for them in times of need, and would help them appropriately and sensitively, they experienced a sense of 'comfort' or psychological security. They felt both comfortable and confident about depending on their supervisors (i.e. using them as a safe haven) if they had any problems. One nurse summed up this sense of security as follows:

I think it's nice to know that you've got that safety net, if you like. That there is somebody *there*, if you need somebody. You might not ever need them, but you know they're there... It's nice to know if you did need them you could pick up the phone, or you could wait and think 'oh yes, she *will* be in today'... I'm sure now if there were any great problems I could go to the manager and discuss them.

The knowledge that supervisors could be relied upon to provide a safe haven was coupled with more positive work attitudes in general. In particular, nurses reported experiencing greater job satisfaction and improved performance because they were sure that their supervisors would help and support them if any problems should arise. Effectively, because nurses with secure working models were not distracted from their work by unresolved relationship issues, they were able to focus their energies on getting the best out of themselves and their jobs. For example:

Because we have the relationship that we do... I enjoy my work. And I perform to the best of my ability most of the time. But because the relationship I have – the way the relationship is – is fine, the atmosphere in work is good... [The relationship] can be the one stabilising factor in a bad day.

1.1.4 Expectations About the Future

Looking to the future, nurses with secure working models did not envisage any change in the state of their working relationships with their supervisors. They were content with their supervision relationships and anticipated that the relationships would continue in the same positive manner for the foreseeable future:

I just see it going hopefully the way it is at the moment.

I don't think it *will* change, because as I say, we've got a good working relationship.

1.2 Avoidant Working Models

From the attachment literature, it was expected that avoidant individuals would either idealise, or play down, the poor quality of their supervisory relationships overall. However, it was also expected that descriptions of actual caregiving behaviour would indicate a clear lack of supervisor acceptance, sensitivity, and responsiveness. It was anticipated that interviewees would report responding to the relationship in a manner consistent with underlying avoidant working models. Finally, it was predicted that avoidant individuals would envisage a future in which they achieved greater independence in the relationship.

1.2.1 Overall Evaluation of the Relationship

There was little evidence that nurses with avoidant working models idealised their supervisory relationships. Instead, they tended to evaluate their relationships in a manner that played down the negative aspects. Rather than focusing on interpersonal difficulties, individuals made sense of their relationships by framing them as acceptable on a 'professional' level. It was evident from the interviews as a whole that many of the avoidant nurses had quite difficult or strained relationships with their supervisors. However, by assessing the relationship from the standpoint of a purely '*working* relationship' they were able to report that they could 'tolerate each other' interpersonally, and 'work together quite well'. It was especially notable that avoidant nurses used language to indicate that the relationship was *not as bad* as it could have been:

Erm, we don't have a great working relationship really. It's not *bad*. I mean it's professional. ...It's there. It's like if you do have to go off sick, or change shifts, you know you're not letting a friend down or whatever. So in a way, there's a lot worse relationships... I mean it's not an *awful* relationship. She wouldn't go out of her way to be nasty, or horrible. She just wouldn't go out of her way to be nice.

1.2.2 Supervisor Caregiving

Awareness – nurses with avoidant working models reported that their supervisors tended not to be aware of how they were feeling when they were at work. Nor were they aware of what an individual's particular needs and concerns might be. For example, it was reported that supervisors rarely asked the individuals about their lives outside of work, and did not pick up on the strain they sometimes felt when they were working on the ward. This led to a sense that the supervisors did not 'know' them as individuals. Moreover, it was interpreted as a sign that they were not interested in the nurses' well-being. The following quote illustrates how supervisors failed to either pick up on, or actively find out about, nurses' well-being:

She's never asked me how I'm coping working day shifts, you know, how my family is affected... Being a manager, she *should* know how you feel, or how our families are, because families *do* affect your work. I mean you don't want her to be all pals, but at the same time she should find out how you're coping, especially when she knew you had problems before.

Acceptance – nurses with avoidant working models described their supervisors as 'cliquey' and 'having favourites'. This was manifested by the nurses perceiving their supervisors as being overtly less warm and friendly with the avoidant individuals relative to other nurses in their workgroup. Effectively, these supervisors rejected certain individuals in favour of others with whom they were especially friendly and talkative:

With some people, you know, she talks a lot, and you can see [at handover time] she's handed over to you, and she just goes and talks to somebody else. Whereas, when certain other people are in charge – I'm not in charge all the time – they sit and chat for hours.

Note that while the nurses in the avoidant group felt acutely aware that they were not accepted as part of the 'in-group' by their supervisors, they did not actually express any desire to be part of the inner circle. Consistent with avoidant working models of their relationships, nurses expressed a preference for remaining independent and aloof rather than getting closer to their supervisors:

I'm not sort of part of the 'in-crowd' or the 'out-crowd'. I'm just there. I do my two nights. That's very much how I feel about it... I stay outside of both.

Accessibility (psychological and physical) – regarding the psychological accessibility component of supervisor caregiving, nurses in the avoidant group tended to describe their supervisors as either 'unapproachable' or 'difficult to approach'. Specifically, these supervisors seemed disinterested in dealing with individuals' problems, and/or they simply did not listen when problems were raised. Several of these nurses also reported that their supervisors were only infrequently seen working out on the ward. In contrast to the supervisors of nurses in the secure group, avoidant nurses perceived their supervisors as spending a lot of time in the office, or at meetings away from the ward. Thus, physical accessibility – the sense that the supervisor could be easily reached when needed – was limited. Note that nurses with avoidant working models often found their supervisors relatively psychologically accessible regarding simple, informational, and task-related matters, but they found them unreceptive to more complex or sensitive issues. A summary of this pattern of inaccessibility is provided by the following extract:

It depends what you're talking about – if you're talking about patients or the day-to-day running of the ward, she's approachable. If you're talking about things that are bothering you, or things that concern other people as well – you know, they've come to you and discussed the fact that they're worried about something, you find that she's not approachable... and I find that she's not there a lot.

Understanding – from the nurses' descriptions, the supervisors of individuals with avoidant working models showed a clear deficit in understanding their employees' needs and concerns, be they of an emotional or material nature. Some supervisors were described as behaving as though life outside of work either did not exist, or was unimportant. Consequently they were inflexible regarding individuals' requests to work a particular shift pattern, or take compassionate leave, for example. Other supervisors were reported as unable, or unwilling, to see things from the point of view of the individual when they raised issues of concern to them. The following excerpt is illustrative of a lack of supervisor empathy that pervaded many accounts:

I rang once and asked to speak to her because I had to take the night off because my boy was ill, and yeah, she didn't want to know. She didn't want to know about the asthma attack, or how scary it was. It was just 'ok, fine. How long do you think you'll be off?'

Appropriateness – as already noted, confidentiality was a key component in nurses' evaluation of the appropriateness of supervisor caregiving behaviour. A strong trend in the avoidant group was that nurses described their supervisors as unable to keep a secret. Nurses believed that if they were to go to their supervisors with a personal problem, for example, their supervisors would automatically discuss the matter with other staff on the ward:

She can't keep a secret. I know that ... In nursing it's either you're pregnant or you've left your husband, this sort of thing. And people say 'Oh, I've told her', and you know it's going to be round the unit. Whereas the manager we had before, you knew if you ever told her anything it would *never* come to anybody – not even another G grade.

Some nurses also reported that their supervisors had spoken to them regarding sensitive, task-related matters, as well as personal issues, on the open ward, instead of taking individuals' to one side for a private conversation.

A further aspect of inappropriateness highlighted by accounts in this group was that supervisors often failed to respond to individual's concerns in a way that adequately addressed the issues. Individuals reported having approached their supervisors because they were worried about staff morale, and unsafe equipment or procedures, for example. All too frequently however, in the views of the nurses with avoidant working models, their supervisors either ignored the problem, made promises to assist and then failed to deliver, or 'fobbed them off' with unrealistic optimism. For example:

You could tell her morale was low as often as you liked, but she just wouldn't listen. She'd say, 'Oh, it's a new unit. It takes time for things to settle down, you know. Just give it a bit longer'.

Collaboration – in contrast to the experiences of nurses with secure working models, approximately half of the nurses in the avoidant group found their supervisors controlling and/or interfering when they asked for assistance in dealing with problems. Supervisors did not respect individuals' ownership of their problems. They attempted to impose their own views, without taking in to account the wishes or suggestions of the individuals who had raised the issues:

I'd say something like 'oh, this patient could go to the ward, but x, y, z, we don't think they should'. And she's say 'oh that's no reason for them not to go. They can go' – and disagree... she'll openly disagree with us rather than say 'well, what about x, y, z?' and coming to a compromise between the two.

Consistency – the supervisors of nurses with avoidant working models behaved inconsistently towards their employees. In particular, supervisors were described as ‘moody’ and ‘unpredictable’. The nurses reported constantly looking out for indications of the state of their supervisors’ moods, and they experienced a general sense of unease and uncertainty on the days when their supervisors were leading their shift. For example, as one nurse commented:

I never quite know how she’s going to be ... sometimes you get a big ‘hello’ and ‘how’s it going’. But she can be quite abrupt sometimes.

When supervisors were in a ‘bad’ mood, they did not attempt to manage their emotions. Instead, they allowed their negative moods to influence social interactions with employees who were not the cause of their affective state. Essentially, the quality of caregiving provided by supervisors appeared to vary according to mood. On a ‘good day’ supervisors were relatively more accepting and accessible than was usually the case when they were approached. On a ‘bad day’ nurses found their supervisors aggressive and dismissive:

[She’s] very unpredictable. Some days, you know, she can be reasonably approachable. And then other days, erm, *totally* the opposite: ‘I won’t have anything to do with you. I don’t wanna listen now’. I don’t know. Very strange.

1.2.3 Relationship Impact

The nature of the caregiving relationships described by nurses in the avoidant group impacted on how they felt and behaved at work in three interrelated ways. These effects appear fully consistent with an underlying avoidant working model of the supervisory relationship. First, the nurses in this group were reluctant to depend on their supervisors as a safe haven. They made a conscious decision not to go to their supervisors if they had a problem:

I would never go to her.

I don’t go to her unless I absolutely have to.

Second, individuals appeared to use work as a means of separating themselves from the negativity generated by their relationships. By focusing on doing their jobs well, they

circumvented the need to interact with their supervisors (e.g. for help or advice). Some also spoke of working harder or more conscientiously so that their supervisors would not have any reason to approach *them*. Total immersion in work enabled individuals to increase their sense of independence and autonomy, thereby distancing themselves from the relationship. Simultaneously, this strategy acted as a distraction that facilitated blotting out or ignoring the unpleasant interpersonal issues:

I think I tend – when I’m at work, I do immerse myself in the work and I don’t let other things bother me at all.

I don’t do anything to make her come and question me about anything. Because I know my job, and there’s no question about how I do professionally. I don’t cut corners. I don’t break the rules. So I don’t ever give her the need to speak to me.

Finally, a common response among these interviewees was that they would not ‘let’ the state of their supervisory relationships ‘get to’ them. Effectively, they chose to suppress the negative emotions that they knew would result if they should allow the situation to occupy their thoughts. One nurse summed up the conscious attempt to suppress the negative emotional impact of her supervision relationship thus:

I just made a conscious decision to be more chilled about the whole thing... I just won’t allow somebody who doesn’t even *realise* they’re having an effect on me to affect me.

1.2.4 Expectations About the Future

A clear theme emerged when nurses with avoidant working models were asked how they thought their relationships might develop in the future: one way or another, they hoped to terminate the relationships. The majority of interviewees had plans to find another job within the next year. The oldest interviewee in the group was counting down the days to retirement. Some speculated over whether the supervisor might be the first to move – they did not want to be pushed out of a job they had previously enjoyed. The following was a typical comment:

If there’s no movement on her side, then I will definitely be thinking of moving myself.

1.3 Anxious Working Models

It was anticipated that individuals with anxious working models would evaluate their supervisory relationships as average, or worse than average. Compared with avoidant individuals' accounts, they should describe the supervisor caregiving they receive as relatively more sensitive and responsive. However, it was expected that inconsistent caregiving would be a dominant theme. The impact of the caregiving relationship was expected to manifest itself in thoughts, feelings and behaviours congruent with an anxious working model of the relationship. Finally, it was predicted that anxious individuals would wish for closer relationships with their supervisors in the future.

1.3.1 Overall Evaluation of the Relationship

Contrary to expectations, individuals with anxious working models summarised their supervisory relationships in broadly positive terms. However, it was notable that anxious individuals did not apply the kind of strong and unambiguous positive language, as used by individuals in the secure group, to evaluate their relationships with their supervisors. In contrast, nurses with anxious working models prefaced their assessments with adjectives such as 'generally', 'quite', and 'fairly', suggesting that certain negative aspects of the supervisors' behaviours prevented wholehearted positive endorsement of the relationship. Relationships were good, but only *on balance*. The following quotes are indicative of the mixed views and weighing-up processes that individuals used to arrive at their assessments:

Erm, on the whole good... On the *whole*, very good. It's just a shame if I am on the end of her bad temper.

I think we get on fairly well. I could discuss certain things – or I feel as if I *can* approach her.

1.3.2 Supervisor Caregiving

Compared with the accounts of secure and avoidant individuals, it was clear that individuals with anxious working models were a more mixed group in terms of their experiences of caregiving in their supervisory relationships. Between them, the anxious nurses tended to have experienced a diverse range of both good and bad supervisor caregiving

– some found their supervisors understanding and accessible, prompt etc., while others did not. There was no clear pattern regarding positive caregiving behaviours. However, there were three trends in negative caregiving that emerged as common. That is, the majority of anxious individuals were affected by at least one of the following negative aspects of supervisor behaviour:

Awareness – in common with their avoidant counterparts, many nurses with anxious working models described their supervisors in ways that suggested they lacked awareness of employees' needs and concerns. Supervisors did not attempt to acquire, or maintain, this awareness through social interaction. In other cases, supervisors were unable to detect changes in how individuals were feeling:

I think she's quite superficial with us. I don't think she's got much interest in me as a person. I don't think she knows much about what I do, what we're doing on the ward... I just don't think she's that interested, it's generally held.

It's almost as if she doesn't even *notice*. She sometimes doesn't even notice that you've been angry with her about something.

An integral part of this lack of awareness was a tendency for the supervisors of anxious individuals to expect that any worries or concerns would be brought to their attention by the affected individuals. Unless employees came forward to tell them otherwise, supervisors assumed there were no problems. In essence, interviewees' accounts suggested that these supervisors did not regard the welfare of their employees as a priority – they perhaps did not wish to devote valuable time to unnecessary social interaction:

I might see her for five minutes a day.... And I may see her in the corridor now and again for ten minutes a day, you know, in the coffee room or whatever. So if I want to see her about something, really the onus is on me to do that... I know she's got a lot of work, but a higher profile would be better.

Her expectations are that people will speak up... which perhaps means that sometimes people haven't got that courage... She sometimes thinks 'well, if they haven't got the courage then they don't *deserve* to' – you know – 'they *should* speak to me about it if they've got a problem'.

Consistency – also in common with the avoidant interviewees, nurses in the anxious group reported that their supervisors were sometimes inconsistent or 'unpredictable' in the way that they behaved towards them. Again it appeared that these supervisors were 'moody' and allowed their moods to influence the way they interacted with employees. For example,

one nurse described how at the start of some shifts her supervisor might arrive at work and respond to the individual's greeting with a surly grunt before shutting herself in the office. The following quote from another nurse illustrates how her supervisor's mood affected the quality of caregiving that could be expected from one occasion to the next:

She's very up and down. So some days she'll be, you know, she's over the moon to see you and she'll chat away and have a really good laugh. And other days she's in a really bad mood, and she's got no interest whatsoever. So when she's in a good mood we get on fine and sort everything out and that's that. But then when she's in a bad mood and she'll maybe send a stropmy e-mail or something, then I just have to leave her to it because there's no point.

Acceptance – the final theme that was common among nurses with anxious working models was a tendency for supervisors to behave in ways that signalled they did not accept individuals as they were. Two categories of interpersonal behaviour were identified through which this lack of acceptance was conveyed.

The first type of interpersonal behaviour employed by some supervisors in this group was that of displaying disapproval. Here, supervisors reacted to individuals in a manner that was akin to a disapproving parent. The disapproval they showed towards employees was of a personal nature in that it was generally targeted at aspects of the individuals' personalities or appearance, rather than their performance *per se*:

Sometimes I can be quite cheeky to the researchers, which is my personality. I like, you know, have a laugh and a joke and might say things like that around her and she's 'oh!' quite shocked. She might go 'Oh, Jane, you shouldn't say that!' Or she'll look horrified I've said something.

The second category of behaviour, indicative of a lack of acceptance, was criticism of individuals' performance. Some of the nurses with anxious working models described their supervisors as having very high expectations regarding clinical standards. Failure to 'live up to' these standards was met by instant, and sometimes public, reprimand. Thus, individuals had to tread carefully in order to avoid criticism. For example, one nurse commented:

She's not particularly laid back at work. And I – some people... get a bit nervous around her because they know that she does seem to have high standards. And she will pick up on even little mistakes... and she'll do it there and then in front of other people if necessary... so she's erm, got an eye for detail.

1.3.3 Relationship Impact

Three trends were identified concerning the impact of anxious individuals' caregiving relationships on their experiences and behaviour at work. Each trend was consistent with the operation of anxious working models of the relationships. Firstly, despite experiencing one or more of the negative aspects of supervisor caregiving discussed above, all of the nurses with anxious models were relatively comfortable with depending on their supervisors as a safe haven should any problems arise:

I feel that if a huge problem arises that I would have no qualms about going straight to her to ask for help.

Secondly, unlike the secure and avoidant interviewees, nurses with anxious working models appeared to have developed a preoccupation with how their supervisors regarded their performance. This was a pervasive theme that was not present in the accounts of secure or avoidant individuals. Specifically, it seemed important to these individuals that their supervisors be 'pleased' with their work and recognise their efforts. In some cases individuals had received positive feedback that confirmed their aspirations for approval from their supervisors, as one person remarked:

I think she's proud of me, because I'm the first F grade she's appointed. And I think she's pleased because I do a good job.

Others clearly ruminated over whether their performance was good enough (i.e. were they meeting those high expectations?), and they wished for verbal reassurance on the issue from their supervisors. This performance anxiety is reflected in the quote below:

I think perhaps for my own psyche it would perhaps be better to have more contact with [ward manager]. Erm, I suppose I just like reassurance really (slight laugh) like everybody... I suppose it's just the usual fundamental wanting to know that you're doing a good job really.

In addition to worrying about how their performance was perceived, there was evidence that the nature of anxious individuals' caregiving relationships tangibly affected their behaviour. As the following excerpt illustrates, some nurses consciously performed their tasks with the goal of pleasing, or winning the approval of, their supervisors:

She does have a *huge* impact on the way I work... That presence in my head means that I do think a little bit more conscientiously about the way I work... So even if she's not on the early [shift], I still feel a little bit 'oh, [ward manager] wouldn't like me to have done that', you know.

The third theme was a preoccupation with closeness in the relationship. This was a broad theme that manifested itself in different ways. For example, one individual talked at some length about wanting to know more about her supervisor; she wanted to 'understand her stresses' so that she might help lessen her supervisor's burden. Some nurses simply wanted a relationship that was more friendly and 'familiar', with more frequent contact. Finally, the quote below shows how another nurse compared the closeness of her relationship with her supervisor in competition with her colleagues:

I very much feel she's got this rapport – this even *better* friendship with a couple of the others. And I often think if there's another interview or job come up...at the end of the day she'd probably prefer to have those other people working with her than me.

1.3.4 Expectations About the Future

When asked about the future of their supervisory relationships a distinctive trend was apparent in the responses of nurses with anxious working models. Irrespective of the nuances in caregiving experienced between individuals in this group, the majority hoped that they would have an opportunity to work more closely with their supervisors and/or build 'stronger' relationships. In addition, it was notable that anxious nurses provided generally longer answers on this subject than their secure and avoidant counterparts. Many gave quite detailed consideration as to how changing workgroup or organisational circumstances might allow them to achieve their goal of greater closeness. Together, these trends are consistent with the preoccupation with closeness previously discussed. The following quote is illustrative of these points:

Well, I suspect the merging of the two units will probably force us closer together...because there's gonna be a lot of issues to resolve over the next twelve months...I think it's inevitably going to be closer because of the major organisational change.

How do you feel about that?

I think it will be good. Erm, you know, if we do get to know each other better and we have more interaction...that can only be for the good really.

2. Negative Interpersonal Events

2. In what ways are differences in specific working models associated with:
 - a) The frequency and nature of 'real-life' negative interpersonal events experienced by employees in their supervisory relationships?
 - b) The cognitive, emotional, and relationship outcomes of 'real-life' negative interpersonal events?

The results for the second research question are discussed below, again taking each category of specific working model in turn. Within each group, the research predictions are first recapped. The findings are then presented according to the following sub-sections:

- Event frequency
- Event themes
- Interpretation and emotions
- Relationship Consequences

Following these sub-sections, a short case study is presented (one per attachment working model) in order to provide a holistic example of the links between specific working models, event themes, interpretations, and emotions.

2.1 Secure Working Models

It was expected that secure individuals would report having experienced fewer negative interpersonal events than their insecure counterparts. Their stories of events were not expected to reveal evidence of unresolved attachment issues in the supervisory relationship (e.g. closeness or trust). In terms of event interpretation, it was anticipated that individuals with secure working models would give their supervisors the benefit of the doubt. In addition, they should express appropriate negative emotional reactions of moderate intensity. Finally they should not have any concerns about lasting damage to the relationship as a result of the events.

2.1.1 Event Frequency

As expected, negative interpersonal events between secure nurses and their supervisors were extremely rare. Interviewees had great difficulty trying to recall a single negative event that had occurred either recently, or at any time, during their relationships. In many cases, interviewees believed that if incidents had occurred, they had been of such minor importance that they had left no trace in their memory. Only three of the secure nurses were able to recall specific incidents, and they stressed that these had been unusual occurrences. The following were typical of the responses:

I can't think of anything really, because they're usually so trivial.

In ten years, just those two spring to mind.

2.1.2 Event Themes

Fundamentally, the strongest theme regarding the negative events experienced by secure individuals was that there were so few incidents in the first place. Between three individuals, a total of four events were recalled, but only three of these (one per person) met the criterion of having occurred within the previous twelve months. It is very difficult to draw conclusions from just three stories. From the available material no trends in attachment themes were apparent. For example, in one incident a supervisor snapped angrily at a nurse for a trivial oversight. In another instance, the supervisor forgot, when drawing up the new rota that the nurse had requested a change of shifts due to personal problems. The common thread was that all three events were transient and/or one-off lapses in sensitive and appropriate caregiving by the supervisors.

2.1.3 Interpretation

Despite the fact that only three stories were provided by individuals with secure working models, there was a consistent pattern in the attributions made for supervisor behaviour. In each case, the supervisor was the locus of the cause of the event. That is, the causes of the negative events were attributed to the supervisors' behaviour, rather than something the individuals had done. In addition however, secure individuals made attributions for their supervisors' words or actions that were external and/or unstable and/or unintentional.

Specifically, they believed that their supervisors had not deliberately set out to upset them (intentionality); they rationalised that their supervisors behaved in a way that was uncharacteristic – a one-off blip, rather than a permanent feature of the supervisor or their relationships (stability); and they reasoned that situational constraints or external pressures had been affecting the way their supervisors' responded to them at that particular point in time (internal-external).

2.1.4 Emotions

The incidence of negative emotions in secure individuals' supervisory relationships was rare because so few people had experienced negative interactions with their supervisors. Based on only three accounts, with diverse content, it is difficult to generalise about patterns in type and intensity of emotional responses. However, congruent with the affect regulation strategies associated with secure working models, none of the individuals expressed extreme emotional reactions, nor did they attempt to play down or suppress the emotional impact of events. In two cases, moderate-to-strong anger was reported. The third individual reported feeling hurt and upset. These emotion types are consistent with holding another party responsible for the emotion-provoking event, as discussed above. The fact that mitigating circumstances were attributed to the agents may also have played a role in modulating the intensity of the emotional reactions. The following extract is an example of secure individuals' emotional reactions and attributions. Here, the nurse was made angry by her supervisors' behaviour towards her, but she attributed the situation to external, unstable, and unintentional causes and this prevented her from reacting more forcefully:

Oh, I felt very angry, like you do. You do your best...you're getting things sorted, then totally unprovoked you get slung down...I thought she probably hadn't realised...but then I knew she was upset and I thought 'she's having a bad day' etcetera, and if I'd have retaliated it would perhaps have made things worse.

2.1.5 Event Consequences for the Relationship

Individuals who had experienced a negative interpersonal incident reported that there were no long-term effects of the event on the relationship. In each case, after the initial emotions had subsided, individuals with secure working models had approached their supervisors to tell them how their behaviour had made them feel. The supervisors generally

apologised for their actions and tried to make amends where necessary. In this way the contentious interpersonal issues were resolved and the harmony of the relationship was restored:

Other than that, everything's been fine.

So there were no longer-term consequences for the relationship?

No, no.

2.1.6 Secure Case Example

John's Story: 'Nobody's Perfect'

I come from a very large family, West Indian parentage...An uncle of mine died at a great age – he was in his nineties...and I was told – I think it was the evening before I was due to come on duty. And it *did* affect me. Yes, you're supposed to leave your personal life at home and click into the nurse's role. I tend to wear my heart on my sleeve when it comes to my family. And I was somewhat upset. And I just happened to mention it in a general form – because you do speak about your families and what have you when you're at work – well, least ways I do. And the comment I got from my manager was, 'oh, well you can't use that as an excuse to go the West Indies now, can you?' I must admit that was hurtful. That cut me to the quick. I didn't say anything at the time but it did upset me. Thinking about it now I can feel the feelings that I felt then... I said later that it was out of order and totally uncalled for, and very inappropriate. Then I forgot about it. That was the best thing to do.

Why do you think she said that?

I think it was just a case of not thinking, that's all. And perhaps – I'm only guessing, but perhaps thinking about it after, my manager probably said to herself, 'oh, perhaps that wasn't the best thing to have said to him'.

In this account, John describes how his supervisor made a callous remark at a time when he was feeling emotionally vulnerable. Usually, John enjoyed a friendly supervisory relationship in which he felt able to casually discuss family and other personal matters. On this occasion, he had not approached his supervisor as a safe haven – the incident took place as part of a general conversation rather than in a proximity-seeking situation. Thus, the implication of his narrative is that his supervisor did not let him down in a caregiving capacity, because he was not seeking care in this instance. Instead, he was insulted and wounded ('hurt') by the insinuation about his character implied by his supervisor's passing remark. Notice that the expression of emotion is measured, rather than extreme or denied.

John is open about his feelings, and admits that recalling the event still brings back the original emotions.

John's secure working model guides his interpretation of the situation. He believes that his supervisor's behaviour was unintentional, and not a stable characteristic of their relationship. This is congruent with the operation of an underlying working model in which the relationship other is viewed as generally trustworthy.

John's narrative does not contain any of the attachment themes that might be expected in the stories of insecurely attached individuals. For example, there is no suggestion that as a result of the event he viewed the supervisor as unreliable (an avoidant theme), or that he felt 'unloved' in the relationship (an anxious theme). Indeed, John revealed earlier in his interview that he held a balanced view of his relationship, such that the 'good points' outweighed the 'bad points'. Given this context the event serves to illustrate the narrator's belief that, even in good relationships, negative events will occur occasionally.

Finally, the relational goal of individuals with secure working models is to maintain harmony in the relationship. This is evident in John's account by the fact that he ensured he set the record straight with his supervisor. He then let the matter drop so that it did not impact on the relationship in the longer term. Maintaining the quality of the relationship clearly was more important than dwelling on the incident.

2.2 Avoidant Working Models

It was anticipated that avoidant individuals would report negative interpersonal events having occurred with relative frequency. It was expected that they would tend to recount events that tapped the avoidant attachment themes of need for autonomy and/or lack of trust in the supervisor. In line with the predictions and findings of the previous study, avoidant individuals were expected to attribute blame for the events to their supervisors. They should report mostly other-focused emotions (e.g. anger and annoyance), but deny or play down the negative emotional impact of events. Likewise, they should appear relatively unconcerned about the impact of the events for the relationship.

2.2.1 Event Frequency

As noted, it was expected that individuals with avoidant working models would report experiencing negative interpersonal events more frequently than their secure colleagues. Partial support was found for this. Specifically, in contrast to the secure nurses, the avoidant interviewees were able to easily recollect one, and occasionally two, negative incidents that had occurred during the past twelve months in their supervisory relationships. Interestingly however, despite the negative supervisor caregiving experiences described by avoidant individuals in the previous section, they did not recollect an abundance of negative interpersonal incidents. Two factors appeared related to this finding:

1. As discussed earlier, avoidant individuals had a tendency to ignore or suppress the impact of their supervisors' behaviours towards them:

I think just a lot of the time it happens...But I think you just block it out so I probably can't remember half of them.

2. Avoidant individuals also tended to limit interpersonal contact with their supervisors as far as possible:

I myself tend to avoid her quite frequently...unless it's really absolute that you have to discuss something with her, which on the whole tends to be not at all.

Thus, the true extent of negative incidents may have been obscured because individuals with avoidant working models actively reduced the opportunities for negative events to occur and/or they deliberately played down any events such that the negative impact was denied.

2.2.2 Event Themes

The accounts of individuals with avoidant working models were remarkably similar. It was clear that the negative interpersonal events were of major significance to the individuals who had experienced them. This was evident from the relative severity of the incidents as well as individuals' reactions to them (discussed below). Additionally, it was notable that, compared with secure and anxious individuals' accounts, avoidant individuals tended to recollect and tell their stories in much greater detail – as if the events had made an indelible impression in their memories. Indeed, a number of comments supported this observation, for

example one nurse stated: 'she thinks I've moved on and forgotten completely about last year, which (*sic*) I haven't'.

The overarching theme linking the stories was that supervisors had abandoned or rejected individuals when they had sought proximity. That is, on occasions when individuals thought they could depend on their supervisors to help or protect them, their supervisors failed to provide a safe haven. For example, when a new and inexperienced nurse made a potentially serious clinical error she expected understanding and help from her supervisor in resolving the issue. However, her supervisor reacted with anger and blame, and punished the nurse. Another nurse was worried that the extreme workload on her ward was affecting the health and morale of the staff. When she voiced her concerns, her supervisor was dismissive and said that the nurse was herself damaging staff morale by complaining and being miserable. Note that avoidant working models are characterised by lack of trust and unwillingness to depend on the other in the relationship. Overall, it appears that, consistent with the attachment themes of their working models, this sample of avoidant individuals recounted those events that were most clearly illustrative of their supervisors' lack of trustworthiness and dependability.

2.2.3 Interpretation

Individuals with avoidant working models exhibited a distinctive pattern of attributions for the negative events they experienced. The locus of the cause of the event was again the supervisor – the individuals did not see themselves as in any way accountable for what had occurred. Typically, the reasons for the supervisors' behaviour were believed to be internal, stable, and intentional. Thus, avoidant individuals reported that their supervisors' actions were caused by the supervisors' personality or incompetence (internal-external); they reasoned that the cause of the event was a fixed characteristic – their supervisors had 'always' been this way, and were therefore unlikely to change (stability); and they believed that their supervisors had perhaps deliberately dealt with them in a negative way because, for reasons they could not understand, their supervisors did not like them (intentionality).

2.2.4 Emotions

A clear pattern emerged when the emotional reactions of avoidant individuals were compared. The dominant trend was that individuals reported experiencing strong anger in response to their supervisors' behaviour. Common phrases were 'very cross', 'mad', and 'very angry'. A smaller number of individuals in this group reported feeling 'upset' in conjunction with their anger. These strong, other-focused emotions are fully consistent with the pattern of attributions discussed above. Thus, anger flowed logically from the fact that avoidant individuals blamed their supervisors for the events, and strongly disapproved of their actions. More fundamentally, from an attachment theory perspective, it seems that these individuals may have experienced the anger and pain of rejection. The quote below is illustrative of the kinds of interpretation and emotional reactions described by individuals in the avoidant group. In this case, the individual experienced strong anger as a result of her supervisor's treatment of her, and she made stable, internal, and intentional attributions for the behaviour:

I was furious...I always had this impression that for some reason she didn't like me...and I felt that this incident and the way she treated me sort of vindicated that.

2.2.5 Event Consequences for the Relationship

The consequences of the negative events reported by individuals with avoidant working models were profound and long-lasting. The pervasive theme that emerged from the accounts was that the incidents were responsible for either establishing or cementing the individuals' avoidant working models of their relationships. Specifically, as a result of the abandonment and rejection they had experienced, individuals held generally negative views of the supervisor and reported a lack of trust in their integrity as caregivers. Consistent with avoidant working models, these individuals also resolved to avoid contact with, and the need to depend on, their supervisors as far as was practicably possible in the future. The following quotes from two avoidant nurses illustrate these effects:

There's always that niggling doubt because of what happened last year...that when it comes to, you know – if I had a serious problem I would by-pass her. I wouldn't go to her. That respect and trust has gone now. At the moment I work with her, and liaise and sort of negotiate with her, so to speak, as and when I need to, but if I've got a specific problem – whereas in the past I would go to my ward manager – I wouldn't now. I'd go to somebody else.

And:

Were there any knock-on effects of the incident for the relationship?

Yeah, I suppose I feel I just keep out of the way really. I mean I don't like working with her and I just keep out of the way really. I just do my job and get on with it.

2.2.6 Avoidant Case Example

Kim's Story: 'You Abandoned Me'

It happened with a group of nurses who were overseas nurses and they...had been unhappy with certain members of staff and one of them was me...Instead of approaching me directly and voicing their concerns, they by-passed that, by-passed the manager and went straight to Human Resources and lodged a complaint... this was four months prior to when I found out. And then it was in an outburst by one of the nurses who proceeded to be... very verbally aggressive, very personal, very rude and basically did harass me in that outburst. – to the point really where I was so upset that I did cry in there. And not having known anything about it – so when I approached my manager about it, she proceeded to not support me, but basically said 'well, they *are* feeling that way'. And I said 'but I don't understand exactly what I have done to make them feel this way. I've always gone out of my way to completely support them...this has come completely out of the blue...' And she wouldn't listen to anything I said, and basically gave me the impression that she fully supported them...and was not going to help in any way towards supporting me.

The things they were complaining about it turns out were things that I had brought up as being unsafe – like ventilators becoming disconnected and them not noticing because alarms had been suspended...so a patient could quite easily have arrested and they'd have not known about it... I discovered they had actually been going through the procedure of perhaps filing an official complaint or whatever about these things. Again my manager did not support me in any kind of way, did not once come up to me and say 'are you ok? How do you feel?', whatever, anything like that. There was always this air of condemnation, you know. There was always this atmosphere that she did not like what I had said or what I'd done...But there was *nothing*, you know *nothing* to like say, 'well, yes they were unsafe. Yeah, I agree with you that we should *do* something about this.'... I ended up going to my union to support me – an avenue that I'd have thought that I'd never have needed to use...

[I felt] anger, real anger. And hatred almost, now... I still to this day don't know why she turned so nasty really. I mean she was always very – she protected the overseas nurses to the extent of jeopardising her relationships with the existing staff.

Kim's story clearly shows that she perceived her supervisor had abandoned her in her hour of need. When Kim discovered the overseas nurses' allegations she was extremely upset. The attachment system is activated under conditions of threat, and prompts individuals to seek a help and protection from their caregiver (e.g. Bowlby, 1969). As her organisational caregiver, Kim trusted that her supervisor would provide protection from the situation she found herself in. She believed that it was her supervisor's role to provide such a safe haven. However, the supervisor not only refused Kim protection from the other nurses' complaints,

she actually sided with them. In so doing, she rejected Kim, effectively leaving her out in the cold to fend for herself. The supervisor's caregiving response, as described by Kim, displays a total lack of warmth, acceptance, or understanding.

Kim reacts to the abandonment and rejection with intense anger. She evidently believes that her supervisor's response was completely unjustified and inappropriate. It is also evident that the emotional impact is enduring and develops into hatred, indicative of holding extremely negative views of the supervisor. The attributions Kim makes for her supervisor's behaviour are consistent with holding an avoidant working model in which the relationship other is viewed with distrust. She implies that her supervisor's behaviour was intentional – she 'turned nasty' towards her for some unknown reason. She also explains the events as caused by something about the supervisor as a person (internal), and she rationalises that the supervisor had always behaved in a way that made the events likely to occur (stable). Taken together, the nature of the incident and its interpretation point towards the core attachment theme for the story as: 'my supervisor is untrustworthy and cannot be depended upon'.

2.3 Anxious Working Models

Like the avoidants, individuals with anxious working models were expected to recall relatively numerous negative interpersonal events. Attachment themes relating to lack of closeness and/or lack of appreciation in the relationship were expected to underlie events. Following from the literature review and discussion of findings in the previous study it was predicted that anxious individuals would make conflicting attributions for the cause of the events, including both self- and other-blame. Emotional reactions were also expected to be other- as well as self-focused (e.g. guilt, embarrassment), and relatively extreme or intense. Finally anxious individuals should appear concerned about the longer-term impact of the events on their relationships.

2.3.1 Event Frequency

Compared with secure individuals, nurses with anxious working models were also expected to report experiencing negative interpersonal events more frequently in their supervisory relationships. In common with the avoidant interviewees, anxious individuals were able to recall one or two negative incidents but found it difficult to remember additional

incidents. However, whereas the paucity of incidents reported by avoidant individuals appeared to be a consequence of their deliberate cognitive and behavioural strategies, the accounts of anxious individuals suggested that straightforward recall difficulties were largely responsible. In general, they were 'sure' that other events had occurred. They believed they would have been fairly minor in nature, but they simply could not recall any details at the time of the interview:

I can't think of anything specific – nothing stands out. Erm, except these little *themes*. So each incident adds to a theme, but is not in itself important. The incidents are absolutely minute...but it's like a *continuity*, erm rather than anything standing out. I'm sure there probably have been. I just can't remember any.

2.3.2 Event Themes

The types of events recounted by individuals with anxious working models were very different from those of their avoidant counterparts. In particular, none of the negative events had arisen as a result of the supervisor's behaviour in a proximity-seeking / safe haven situation. The common thread in anxious interviewees' accounts was that the supervisor had in some way criticised, chastised, interfered, or disregarded some aspect of their employees' performance or opinions. For example, one supervisor over-ruled a decision made by a nurse regarding annual leave allowance for a junior member of staff. Another supervisor was critical of the way a nurse had completed her appraisal documentation and obliged her to re-write the forms to her specification. Yet another supervisor was scathing of a nurse's views regarding the competence of another member of staff.

Anxious working models are characterised by a desire for closeness in the relationship. Consequently anxious individuals need to feel that they are liked and valued by the relationship other. From the above it appears that individuals were sensitised to events that threatened these attachment needs. Specifically, individuals may have perceived their supervisors' critical or interfering behaviour as indicating that they were not liked as much as they would wish, or that their supervisors did not value or recognise their contributions.

2.3.3 Interpretation

A mixed picture emerged regarding the attributions made by individuals with anxious working models. There were no consistent trends in the use of internal-external, and stability

attributions. However, examination of the locus, intentionality, and motivation dimensions revealed some patterns. There was a tendency to locate the cause of the event with both the supervisor and the individual. Effectively some individuals believed that they were partly accountable for the incidents through their own actions (e.g. poor performance) or some deficit in their personality (e.g. lack of assertiveness). Anxious individuals also tended to believe that their supervisors had not intentionally behaved in a manner that would lead to negative emotions. Nevertheless, some also reasoned that their supervisors' behaviour had been selfishly motivated – they did it because they were looking out for their own interests.

2.3.4 Emotions

The picture regarding the emotional reactions of anxious individuals was one of relative diversity. An overarching theme was that, compared with the other groups, individuals with anxious working models tended to report experiencing a broader range of negative emotions in response to events. Most individuals gave three or four terms to describe how they had felt, compared with just one or two offered by the secure and avoidant individuals. The most commonly reported emotions were varying degrees of annoyance and frustration. Feeling 'hurt' and 'upset' by the supervisors' actions was also quite common. Finally, unique to this group, some individuals reported experiencing self-focused emotions, namely feeling 'guilty' and 'mortified'. There was no clear pattern regarding the intensity of the emotions felt, however.

Comparing the patterns of interpretation and emotions, the reports of frustration appear consistent with attributing selfish motivation to the supervisor's behaviour, as discussed above. Also consistent are the self-focused emotions and the attribution of self-accountability. The feelings of annoyance, hurt, and upset are congruent with holding the supervisor at least partly accountable for the events. The extract presented below illustrates the greater emotional expressiveness of anxious individuals. It also demonstrates attributions of both self and other-accountability:

Pee-ed off, I suppose. Frustrated. Yeah, and a bit hurt really, because she'd never been (pause) never been a bit sharp like that really, so. (pause) But I was just lazy really.

2.3.5 Event Consequences for the Relationship

Individuals with anxious working models generally reported that they did not experience any long-lasting impact of negative interpersonal events on their supervisory relationships. Again, however, it is interesting to note that there was a slight difference in the language of the anxious individuals compared with their secure counterparts. Whereas secure individuals used unambiguous phrases such as a simple 'no', or 'not at all', anxious individuals' language suggested a little less certainty with the use of terms such as 'I wouldn't say so', 'not really', and 'I don't think so'. Overall, it appears that after the initial emotional reactions to events, individuals with anxious working models experienced a period of negative mood lasting perhaps a few hours. This mood effect suggests that, consistent with the affect regulation strategies associated with attachment anxiety, these individuals may have ruminated on the event for some time after its occurrence. Following this period however, they tended to return to their normal affective state, and carry on as if nothing had happened:

Were there any knock-on effects for the relationship?

Well, you can feel a bit annoyed for a bit, can't you? You know, usually for a couple of hours you might be in a bit of a mood. But then it passes really. So maybe to begin with.

Erm, no. No I don't think so...I mean it still makes me *mad*, because I remember how upset I was at the time...But then I forgot about it and had the two days off and came back to work and she was fine.

2.3.6 Anxious Case Example

Joanne's Story: 'You Don't Love Me Anymore'

[It] wasn't really directly aimed at me as *such*, even though I felt it *was*. We never got the F grade jobs that were going. There was a couple of us – we'd been there for about seven or eight years... So we didn't get the job this time, erm, but then somebody from an office got it that's never worked on the ward... [Before] *they* started... there'd been no F grades as such, so a few of us that had gone for the job, we'd all had a lot to do with the reconfiguration. So they'd sort of asked us for our input, gone to meetings, do you know what I mean? And all of a sudden these F grades came, and er, they didn't know the ward, *nothing*. They'd had nothing to do with any of this. And it was very much 'right, we've got an F grade meeting'. And *they* went and us three were told we couldn't go any more... You were quite hurt. It *was* hurtful – that you'd done all this work, and then all of a sudden you weren't needed... I don't think she meant to do it... You just felt really gutted... I think she could have handled that better. But I don't think she realised.

Congruent with an anxious working model of the supervisory relationship, the core attachment theme of this story appears to be 'my supervisor does not value me'. Joanne worked hard for many months to help her supervisor prepare for the forthcoming organisational change programme. Then, upon the arrival of the new, more senior, appointments to the ward, Joanne's supervisor apparently chose to ignore her efforts and expertise. Joanne clearly takes this very personally. Despite the fact that others of her colleagues are in the same position, she interprets her supervisor's actions as a sign that *her* contributions are not valued, and she is not 'good enough' compared with the usurping F grades.

Joanne is hurt by her supervisor's actions and deeply disappointed ('gutted'). It is evidently painful to realise that her supervisor no longer '*needs*' her. There is a sense that Joanne feels that the closeness in relationship with her supervisor is lost, now that her supervisor is no longer interested in Joanne's work - the work that bonded them. Joanne's attributions for her supervisor's actions are simultaneously accusing and excusing. She appears to blame the supervisor for handling the situation so insensitively. On the other hand she does not believe her supervisor intended to behave negatively. Overall, the nature of the incident and Joanne's reactions to it are consistent with the negative self-views and confused other-views that are associated with anxious working models.

3. Discussion

The overall aim of the study was to obtain in-depth, qualitative, information about employees' 'real-life' relational experiences that would enrich and extend the quantitative findings of Study 3. This aim was achieved. Interviewees provided detailed accounts of the caregiving they received in their supervisory relationships, and the consequences of this for how they felt and behaved when they were at work. They also provided insight into the different types of interpersonal events that tended to lead to negative emotions in the relationship, and the role of specific working models in interpreting and responding to them. The sections below summarise the main findings before focusing in more depth on issues raised by the present study.

3.1 Relationship Characteristics

Table 10.1 below summarises the main findings for the first research question. As expected, individuals with secure working models were very satisfied with their supervisory relationships, and they reported that their supervisors provided consistent, high quality caregiving. According to employees' descriptions, in parallel with the primary caregivers of the infant-caregiving literature (e.g. Ainsworth et al., 1978), supervisors of secure individuals were aware of their employees' feelings, and understood their needs and concerns. Interpersonally, they were warm, friendly and accepting. When approached for help and advice the supervisors of secure individuals were accessible, both psychologically and physically. They responded to individuals' distress signals promptly and appropriately. They knew when to listen and, when action was required, they worked collaboratively with the individuals to solve their problems.

The impact of this type of supervisory relationship on individuals' thoughts, feelings, and behaviour at work pointed to the existence of underlying secure working models of their relationships. In particular, there was no evidence of unresolved attachment issues (e.g. preoccupation with closeness, or issues of trust and independence). As a result, secure individuals appeared more involved and satisfied with their jobs. This supports previous findings by Hazan and Shaver (1990) concerning the impact of secure working models on work orientation. Finally, consistent with the notion that secure individuals' interaction goals involve maintaining a balance between autonomy and closeness in their relationships (Collins & Read, 1994), individuals with secure working models of their supervisory relationships expressed hope that their relationships would be the same in future (i.e. neither closer nor more autonomous) because they perceived no need for them to change. As a whole, these findings are fully consistent with the predictions.

Individuals with avoidant working models displayed a tendency to play down the extent to which their supervisory relationships were unsatisfactory. This downplaying effect is consistent with the avoidant affect regulation strategy of denying/suppressing the impact of negative experiences (Kobak & Sceery, 1988; Mikulincer & Orbach, 1995). Notably, the positive emphasis of avoidant employees overall evaluations was not borne out by the details of their supervisors' actual behaviours. Akin to the parents of children who develop avoidant working models (e.g. Ainsworth et al., 1978), employee accounts revealed that these

supervisors were perceived as providing poor quality caregiving. Supervisors in this group showed little awareness or understanding of their employees' feelings, needs and concerns. They were bad tempered and rejecting of the interviewees - excluding them from social interactions in favour of other members of the workgroup. These supervisors were also psychologically inaccessible, and often unavailable or slow to respond in times of need. When dealing with employees' problems they tried to impose their own opinions, and they often betrayed confidentiality. Contrary to expectations, there was evidence that some aspects of supervisors' behaviour (e.g. accessibility) varied according to mood. This type of inconsistency would more typically be expected from anxious employees' supervisors. Nevertheless, the overall pattern of caregiving for this group was more consistently rejecting than accepting.

Table 10.1: *Summary of employees' descriptions of their supervisory relationships*

| Specific Working Model | Evaluation of Relationship | Supervisor Caregiving | Impact of Nature of Relationship | Future Expectations |
|------------------------|-------------------------------|---|---|---|
| <i>Secure</i> | 'good' / 'very good' | -Warm and accepting -Available -Sensitive -Responsive -Consistent | -Psychological security (attachment needs met). -Comfort depending on supervisor. -Job satisfaction. | No change. |
| <i>Avoidant</i> | 'not that bad' (playing down) | -Rejecting / ignoring -Unavailable -Insensitive -Unresponsive -Inconsistent | -Lack of trust in, and reluctance to depend on, supervisor. -Immersion in work. -Emotional suppression. | Separation / termination of relationship. |
| <i>Anxious</i> | 'fairly good' | -Critical / disapproving -Unavailable -Inconsistent | -Preoccupation with closeness and familiarity. -Performance anxiety and desire to please supervisor. | Closer / stronger relationship. |

In terms of the impact of this style of relationship on individuals' thoughts, feelings, and behaviour at work, accounts were consistent with the operation of avoidant working models. They did not trust their supervisors and tried to avoid having to turn to them for help. They immersed themselves in work, thereby increasing their sense of autonomy, and they attempted to ignore or suppress the negative emotional impact of their relationships. Finally, consistent

with an interaction goal of achieving greater autonomy in the relationship (Collins & Read, 1994), avoidant individuals expressed a strong desire to increase their independence from their supervisors – indeed they actually wished to achieve the ultimate autonomy by terminating their relationships. Overall, the findings for the avoidant group were largely congruent with expectations.

Individuals with anxious working models had more positive views of their supervisory relationships than was anticipated, but it was clear that there was room for improvement in their supervisors' caregiving behaviour. Consistent with the findings of Ainsworth et al. (1978) regarding the patterns of maternal caregiving associated with the development of anxious-ambivalent working models in infants, anxious interviewees' accounts revealed a more mixed picture of the supervisor caregiving they received, compared with their secure and avoidant counterparts. Some positive supervisor characteristics were reported (e.g. friendliness), however many of the same supervisors also tended to demonstrate a lack of genuine awareness of, or interest in, employees needs and concerns. These facts, in combination with limited accessibility, suggest that some supervisors did not appear to give priority to the well-being of their employees. Many supervisors were at times critical or disapproving of their employees. Other supervisors were described as moody and unpredictable. Overall, however, behavioural inconsistency was not as strong a theme as had been anticipated for the anxious group. Instead, it appears that it was supervisors' critical attitudes that may have had the greatest impact on undermining individuals' sense of self-worth in the relationship, and hence establishing negative self-models.

Indeed, the effects on individuals of working in such a relationship environment appear consistent with the operation of underlying working models of anxious attachment to the supervisor. Individuals worried about meeting their supervisors' performance expectations and/or were preoccupied with the degree of familiarity and friendship in the relationship. Congruent with these themes, and the interaction goal of achieving closeness that is associated with attachment anxiety (Collins & Read, 1994), anxious individuals hoped for opportunities to develop a closer or stronger relationship with their supervisor in future. Overall, the findings for individuals with anxious working models were broadly in line with expectations.

In sum, as predicted, the three attachment groups differed markedly in their accounts of how warm, sensitive and responsive their supervisors were. Secure individuals reported the highest levels of positive caregiving characteristics, and avoidant individuals the lowest. The impact of supervisor caregiving on how individuals felt and behaved at work supported the central proposition of the thesis that differences in caregiving influence the development of different types of working models of the relationships.

3.2 Negative Relationship Events

Working model-congruent differences were also found between groups regarding the nature of negative interactions experienced with supervisors, their underlying attachment themes, attributions, and types of emotional reactions. Table 10.2 presents the main findings for the second research question. The table shows that the findings for secure individuals were consistent with predictions throughout. Negative interpersonal events with supervisors were exceptional. When they did occur, individuals attributed them to external, unstable, and unintentional causes.

Table 10.2: *Summary of negative relationship events and outcomes.*

| Specific Working Model | Interpersonal Events | Attachment themes | Negative Emotions | Interpretation | Relationship Consequences |
|------------------------|--|--|--|---|--|
| <i>Secure</i> | Events rare. No pattern in content. | No underlying attachment themes. | Mild -moderate intensity anger and upset. | -External -Unintentional -Unstable | None |
| <i>Avoidant</i> | Failure of supervisor to provide a safe haven at a time of need. | Untrustworthiness and lack of dependability of supervisor. | Strong – very strong anger. Some upset. No self-focused emotions. | -Internal -Intentional -Stable | Long term. Establishment or cementing of avoidant working model. |
| <i>Anxious</i> | Criticism / reprimand / interference by supervisor. | Need to be valued / liked by the supervisor. | Diverse range or other- and self-focused negative emotions (e.g. frustration, hurt, guilt). Varying intensity. | -Dual locus of accountability -Unintentional -Selfish motivation (supervisor) | Short-term affective reaction/ rumination. No lasting impact. |

Individuals with secure working models were comfortable expressing their emotional reactions. These reactions seemed appropriate to the nature of the events in terms of type and intensity. No particular attachment themes were apparent in the stories gathered. Finally, secure individuals did not perceive any lasting impact of the events on their relationships. This pattern of findings supports existing theory and research for secure individuals indicating that the positive working models of self and other (i.e. low anxiety and avoidance), combined with constructive affective regulation strategies, lead to fewer negative social interactions and memories, unbiased social information processing, and emotional responses that are generally less negative (e.g. Collins, 1996; Mikulincer, 1998b; 1998c; Tidwell, Rice & Shaver, 1996).

The findings for avoidant individuals partially matched expectations. They were indeed able to recall more events than secure individuals, but otherwise attempted to avoid or ignore further negative encounters. Stories of negative events featured avoidant attachment themes of lack of trust / dependability, as expected, but events tended not to involve supervisors blocking their employees' goals of independence. The internal, intentional, and stable attributions made for supervisors' behaviour were fully consistent with the findings of Study 3, and previous research showing that negative other models are primarily associated with other-blame (e.g. Collins & Read, 1996; Mikulincer, 1998b). Regarding emotional reactions, other-focused negative emotions were the most common, as predicted. However, against expectations avoidant individuals seemed just as emotionally expressive as their secure counterparts. Also contrary to expectations, these individuals were open about the negative impact of the incident on their working relationships. These inconsistencies are considered further in the next section. In general, however, the findings for avoidant individuals support previous research indicating that negative models of other may sensitise individuals to issues of trust violation in relationships, lead to hostile attributions for events and, in turn, the experience of mainly other-focused negative emotions (e.g. Collins, 1996; Mikulincer, 1998a; 1998c).

The findings for anxious individuals largely supported the predictions. They had experienced more negative events than secure individuals, although recall problems prevented more than one or two detailed accounts per person. As anticipated, the core attachment theme underlying events related to a lack of appreciation/liking by the supervisor. Lack of the desired degree of closeness was also implicit in many such accounts. Also in line with

expectations, anxious individuals' attributions for the events held both the self and other accountable. In addition, there was evidence that anxious individuals were confused about their supervisors' motives. The intensity of emotional reactions was not extreme, as had been predicted. However, compared with secure and avoidant interviewees, anxious individuals were more emotionally expressive, and they reacted to events with a greater diversity of emotions (including self-focused emotions).

Finally, against expectations, anxious individuals did not appear overly worried about the longer-term impact of events on their relationships. However, their language suggested a degree of uncertainty when compared with secure individuals' responses. In addition, they showed a tendency to ruminate, and experience negative mood for some time following an event. This is consistent with the characteristic affect regulation strategy of anxious individuals whereby they seem unable or unwilling to detach from negative experiences (e.g. Mikulincer & Orbach, 1995). Overall, the pattern of findings supports existing research indicating that attachment anxiety is associated with heightened sensitivity to interpersonal events that threaten relationship closeness, a tendency towards both self- and other-blame, and greater overall emotionality in response to events (e.g. Collins & Read, 1994; Collins, 1996; Hazan & Shaver, 1987).

3.3 A Closer Look at Negative Emotional Reactions

As discussed above, predictions were confirmed regarding the types of negative emotion that were reported by the avoidant and anxious individuals. In contrast to the results of Study 3, there was no evidence that avoidance was associated with self-focused (distress) emotions. Instead, other-focused emotional reactions predominated. Anger was the emotion most commonly experienced by avoidant individuals, and this was consistent with holding a negative view of the supervisor in the working model. Anxious individuals were the only group to report self-focused emotions such as embarrassment and guilt. They also reported a wide variety of other-focused emotions. This combination of other- and self-focused negative emotions is congruent with holding negative self-views, and negative/confused other views, in the working model of the relationship. Although this stage of the research was not intended as a specific test of the research model(s), these findings support the proposed relationships between working models and type of emotional response.

However, it is more difficult to draw conclusions about working model differences in intensity of emotional reactions. It had been anticipated that avoidant individuals' 'minimising' affect regulation strategies (Consedine & Magai, 2003) would lead them to play down the emotional impact of the events they reported. In fact, they expressed strong anger that seemed appropriate to the nature of the incidents. One possible explanation for this may lie in the fact that the research design focused on *critical* relationship incidents. The nature of the incidents recounted by avoidant individuals suggested that they may have been responsible for establishing or affirming the avoidant working models of the relationship. Thus, it is perhaps not surprising that the emotional reactions were intense. Moreover, if the avoidant working models had not yet been formed, the emotions they reported from that time may not have been subject to the suppression strategy that was developed later as a way of coping with the relationship. Consistent with this is the finding that, while avoidant individuals did not appear to suppress their emotional reactions to the critical incidents, they nevertheless suppressed their reactions to their supervisors' subsequent behaviour. In particular, many spoke of being determined not to let their supervisors 'get to them'. The implication is that, if it were possible to obtain data about the more mundane, everyday interpersonal occurrences between avoidant individuals and their supervisors, it might then be possible to observe the hypothesised emotional suppression. In particular, a diary-study of 'post-critical incident' interactions with the supervisor might be more revealing. Nevertheless, the data gathered in the current study may provide valuable insight into the development of avoidant working models.

Individuals with anxious working models had been expected to report extreme or intense emotional reactions in response to events due to their 'maximising' affect regulation strategies (Consedine & Magai, 2003). On the basis of linguistic quantifiers (e.g. use of 'very', 'extremely', 'really' prefacing emotion terms) there was no consistent pattern to support the intensity hypothesis. However, anxious individuals tended to report having experienced a broader range of emotions simultaneously in response to events. Thus, anxious individuals may not have experienced specific emotions with extreme intensity, but the fact that they experienced comparatively *more* emotions overall does provide some support for the hypothesis that anxiety is associated with greater overall emotionality. In particular, previous researchers have suggested that the reporting of multiple negative emotion terms in relation to a single event is an indication of the inability to prevent negative experiences sparking off a

network of associated negative memories and emotions (Buchheim & Mergenthaler, 2000; Mikulincer & Orbach, 1995).

3.4 Links to Study 3

The findings of the present study may help to clarify two of the anomalous findings from the previous study: the non-relationship between anxiety and event interpretation, and the positive association between anxiety and supervisor caregiving.

3.4.1 Anxiety and Event Interpretation

In study 3, the expected positive association between specific anxiety and negative event interpretation (involving negative attributions for the supervisor's behaviour) was not found. The interview data may shed some light on this finding. In particular, event interpretation was measured as a single dimension in Study 3. This may have obscured subtler patterns of attributions associated with anxious working models. The present interviews, on the other hand, enabled investigation of these nuances. Specifically, the qualitative data regarding anxious employees' attributions suggest that, in addition to the hypothesised self-blaming, individuals were confused about the cause of their supervisors' behaviour. Overall, they attributed inconsistent causes to the negative relationship events they experienced (e.g. unintentional, yet selfishly motivated). Assuming anxious individuals drew upon the same inconsistent attributional biases when responding to the hypothetical events in the previous study, it may be that the net effect was for the more and less negative attributions to cancel each other out, or appear random. This could result in the observed non-significant correlation. Future quantitative research should therefore investigate event interpretation in terms of separate dimensions of attribution (including self-blame).

3.4.2 Supervisor Caregiving and Anxious Working Models

Study 3 found a small, positive association between supervisor caregiving and specific anxious working models when a small, negative association had been hypothesised. The qualitative data was consistent with this finding, showing that individuals with specific anxious working models did indeed express relatively positive (but by no means glowing) views of their supervisory relationships. There did not appear to be any inconsistencies

between overall evaluations of the relationships and details of supervisor caregiving in the relationships. That is, anxious individuals were able to support their claims. However, the interviews revealed that the aspects of supervisor caregiving that were most characteristic of anxious individuals' supervisory relationships concerned lack of acceptance, prioritisation of employee welfare, and inconsistency. While the frequency anchors used in the SCS response format (as opposed to an agree-disagree format) are designed to tap overall consistency of caregiving behaviours, it is notable that there are relatively few items in the scale that tap specific facets of acceptance and prioritisation behaviours. This leads to speculation that the current version of the SCS may not discriminate as effectively as it should because it may not fully represent the spectrum of caregiving behaviours that are enacted by the supervisors of anxiously attached employees. Perhaps if the scale were to be revised incorporating more relevant items, the predicted small, negative association between SC and anxious working models might be found in future research.

3.5 Severity of Relationship Difficulties

In general terms, the interview data suggested that avoidant working models were indicative of more serious interpersonal problems in the supervisory relationship compared with anxious working models. Avoidant individuals described their supervisors as consistently rejecting, insensitive and unresponsive. Most had experienced a significant / pivotal event in which their supervisor abandoned or rejected them. The development and operation of avoidant working models meant that the affected individuals felt unable to use their supervisors' as a safe haven. They were forced to find alternative / surrogate organisational caregivers to fulfil this role. (N.B. The fact that they did turn to others for help supports the notion that an individual's avoidant working model was specific to her official supervisory relationship – it didn't generalise to other relationships).

The relationship experiences of anxious individuals seemed to fall half way between the largely positive experiences of the secure individuals on the one hand, and the largely negative experiences of the avoidant individuals on the other. Compared with the avoidant employees, anxious individuals' relationship issues (i.e. instances of poor supervisor caregiving) were often subtler and seemingly less pervasive in their daily work lives. Moreover, anxious working models did not appear to be associated with major interpersonal difficulties in the supervisory relationship. None of the anxious individuals had experienced

negative interpersonal events of the severity reported by avoidant employees. Compared with their avoidant counterparts, anxious individuals were relatively comfortable depending on their supervisors as caregivers, and they were relatively more confident that they had someone to turn to in times of need. Nevertheless, supervisors' criticism, disapproval, inconsistency, and lack of priority given to employees were clearly a source of at least mild insecurity for individuals regarding self-worth in their relationships. These differences in the nature and severity of relationship difficulties may have practical implications for organisational interventions. This issue will be discussed further in the next chapter.

3.6 Caveats and Limitations

The study built upon the findings of the previous study by enabling the investigation of individuals' cognitive and emotional reactions in response to actual (as opposed to hypothetical) negative interpersonal events with their supervisors. A potential drawback to this procedure is that the benefits of standardisation are lost - one is not comparing like with like when looking at differences in reactions to 'real' events between the anxious and avoidant individuals. In practice, there was remarkable similarity in the types of events recalled by anxious and avoidant individuals respectively, suggesting that drawing conclusions about interpretation and emotion within-groups is unproblematic. However, given that the types of events recounted by anxious and avoidant individuals respectively were so different, there is a question mark regarding conclusions about between-group attributions and emotional reactions. How would anxious individuals have reacted to the events related by the avoidant individuals, for example? This is a difficult question to address empirically, since the results of the present study indicate that anxious and avoidant individuals were more likely to experience, and/or be sensitised to, particular types of negative supervisor behaviour. Thus, in a naturalistic setting, it may not be possible to make meaningful between-group comparisons of intensity of emotional reactions or types of attributions in response to real-life events. However, it *can* be concluded that differences in the nature of supervisor caregiving are associated with qualitatively different interpersonal and emotional experiences in the supervisory relationship. This is an important contribution to our understanding of negative emotions at work.

Caution is again necessary before inferring causality from these findings. In particular, it is important to keep in mind that the present findings reflect trends in accounts collected

from a relatively small number of people. Further research with larger and more diverse samples (e.g. in terms of gender and occupation) is required to replicate these findings. In addition, the data collection was cross-sectional and retrospective – based on verbal histories gathered at a single time-point. Only longitudinal research can provide information about causation. For example, without longitudinal research, perhaps incorporating observation, one cannot be certain whether the reported supervisor caregiving behaviours led to the development of individuals' working models, or whether descriptions were simply biased by the existence of those self-same working models. It is encouraging that interviewees reported supervisor behaviour and consequences that matched theoretical predictions, and that reported interpretations for events matched emotional reactions. Nevertheless, these findings should be considered exploratory, preliminary, and therefore tentative.

The present study focused on the role of specific working models only. This is because it was assumed, based on theory and research (e.g. Baldwin et al., 1996; Collins & Read, 1994; Pierce & Lydon, 2001) that specific models would be the most salient and accessible to individuals when actually discussing the supervisory relationship. Specifically, talking about the supervisor should prime and activate individuals' relationship-specific working models. The findings appear to support this assumption because the observed trends in the data were generally in line with predictions. Thus, individuals recalled experiences that were congruent with predictions based on their supervisor-specific working models. This also supports the findings of Study 3, and previous theory and research suggesting that specific models are the most influential in guiding thoughts and feelings in specific relationships. However, the results of Study 3 also showed that global working models, especially anxiety, played a role in determining reactions to interpersonal events. Ideally, future researchers would be able to obtain a sample large enough to investigate whether verbal accounts of real supervisory relationship experiences contain any trends associated with the effects of global working models, in addition to the effects of specific working models.

4. Summary

In the present study individuals with secure, avoidant, and anxious specific working models were interviewed about the nature and impact of the caregiving they received in their supervisory relationships. The study was designed to enrich and extend the findings of Study 3 by providing insight into the real-life emotional experiences of employees, in the context of

their supervisory relationships. The results supported many of the findings of the previous study and also helped to clarify some theoretically inconsistent relationships formerly found between anxiety, supervisor caregiving, and event interpretation. In general, the interview findings were in line with predictions based on the attachment theoretical framework guiding the research programme. In accordance with the theory, there were clear differences in descriptions of the quality of supervisor caregiving received by individuals, depending on their levels of relationship-specific anxiety and avoidance. Differences in specific working models were systematically associated with differential sensitivity to / experience of negative relationship events. In turn, patterns of interpretation and negative emotional responses appeared to flow from differences in working models of self and other, and associated differences in affect regulation strategies. Overall, individuals' accounts provided rich, contextual information that helps us to build a fuller picture of how the supervisory relationship influences employees' experiences of negative emotions at work.

Chapter 11: Conclusion

This chapter concludes the thesis with a consideration of the overall findings and implications of the research programme. Detailed discussions of the findings for each study were provided at the end of the respective results chapters. Therefore, the present chapter begins by presenting a summary and integration of the main findings. Following this, the theoretical contribution of the research is assessed. The caveats and limitations that should be kept in mind when interpreting the results are presented next. Then, directions for future research, and the practical implications of the findings are outlined. The final section presents the overall conclusion for the research.

1. Main Findings

To recap, the overall aim of the research was to use attachment theory as a framework for exploring the nature and causes of employees' experiences of negative emotions, in the context of their supervisory relationships. In order to achieve this aim, the research was carried out in three, inter-connected stages involving development of the Supervisor Caregiving Scale (SCS), a questionnaire survey, and follow-up interviews. The first two stages enabled empirical testing of the proposed Independent Effects and Interaction models of employee negative emotions in supervisory relationships. The final stage provided in-depth, contextual data to enhance the quantitative findings. The key findings are presented below, organised according to the major themes that have pervaded the research: supervisor caregiving and specific working models; negative relationship events; event interpretation; negative emotional reactions; specific versus global working models; and Independent Effects versus Interaction models.

1.1 Supervisor Caregiving and Specific Working Models

At the heart of the attachment theoretical perspective of employee negative emotions in supervisory relationships is the assumption that supervisors function as primary organisational caregivers for their employees. Thus, on the basis of a review of the infant-caregiver attachment literature, the caregiving construct was translated for use in the context of employee-supervisor relationships. In order to develop a scale measure (SCS), supervisor caregiving was operationalised as eight inter-related components of supervisor behaviour:

awareness, understanding, acceptance, accessibility, promptness, appropriateness, collaboration, and consistency. In research conducted to assess the psychometric properties of the scale (Studies 1 and 2) it was found that, despite the fact that one or two of the reverse-scored scale items showed shifting allegiances across samples, the components of supervisor caregiving are best represented as a single dimension. This conclusion was supported by the results of CFA in Study 3. Studies 1 and 2 also showed that the SCS had good reliability and validity.

Consistent with predictions throughout, differences in the warmth, availability, and responsiveness of supervisor caregiving predicted differences in individuals' specific working models. Quantitatively, the relationship between supervisor caregiving and specific avoidance was strong and negative, as expected. From the interview material, avoidant employees described their supervisors as consistently rejecting, controlling, and insensitive, especially when they turned to them for help or advice. It is speculated that, through repeated negative relationship experiences, these employees may have learned that they could not trust their supervisors to deal with their concerns helpfully or appropriately. Congruent with this notion, avoidant individuals reported developing increasing self-reliance in carrying out their work, thereby enabling them to avoid any unnecessary contact with their supervisors. This pattern is fully consistent with the existence of an avoidant specific working model of the supervisory relationship.

The research found a discrepancy between Studies 2 and 3 concerning the direction of the predicted small relationship between SCS and specific anxiety. This issue remains to be resolved. Nevertheless, when combined with the interview findings, the resulting picture of the relationship between supervisor caregiving and specific anxiety is consistent with attachment theory predictions. Employees who held negative models of self in the supervisory relationship (i.e. anxiety) tended to report having experienced their supervisors as relatively more sensitive and responsive compared with their avoidant counterparts. However, the supervisors of anxious individuals were also described as critical, disapproving, and inconsistent, and they appeared not to give priority to ensuring the well-being of their employees. In this way the supervisors of anxious individuals may have gradually eroded their employees' sense of self-worth in the relationship. This was manifested by anxious employees' preoccupation with achieving closeness/friendship in the relationship, and winning approval regarding their performance.

Examining the supervisory relationship experiences of secure individuals (low avoidance and anxiety) qualitatively was valuable in providing a control group, or baseline, against which to assess the experiences of insecure individuals. If supervisor caregiving was reliably associated with differences in specific working models, secure employees should not report having experienced any of the negative supervisor behaviours reported by insecure individuals. Nor should they be preoccupied with relationship issues such as closeness, approval, trust, or autonomy. In support, individuals who scored low on both specific anxiety and specific avoidance had consistently experienced their supervisors as warm, available, and sensitive. In contrast to insecure individuals, secure individuals did not appear concerned about their supervisor's degree of friendliness, or views of their performance. In addition, they believed that they could trust their supervisors if ever they needed to turn to them for help or advice on any issue. This is consistent with holding specific working models that were characterised by positive, instead of negative, models of self and other in the supervisory relationship. Overall, it is concluded that differences in the quality of supervisor caregiving, as reported by employees, were systematically associated with differences in the security of individuals' specific working models.

1.2 Negative Relationship Events

From the literature review it was apparent that the actions of managers and supervisors are a major source of negative emotions at work (e.g. Basch & Fisher, 2000). The present research provided insight into the nature of employee negative emotional experiences in supervisory relationships by identifying the types of interpersonal events that are associated with negative emotions, from an attachment theory perspective. The results of the survey in Study 3 provided a preliminary indication that relationship events, in which supervisors responded negatively or ambiguously when employees approached them for help, were (hypothetically) a source of negative emotions. Examples of real-life relationship events gathered by the interviews of Study 4 enabled investigation of the types of events that were associated with negative emotions, and attachment-related differences in the underlying themes of these events.

The results were consistent with attachment theory predictions. Individuals scoring high on specific avoidance reported events in which the supervisor had rejected them or failed to provide support when it was needed. The underlying theme was betrayal of trust – the trust

that the supervisor would provide a safe haven when needed. The events reported by individuals with relationship-specific anxious working models involved some form of criticism, reprimand, or interference by the supervisor. The underlying theme concerned a threat to anxious individuals' need to be liked/valued by the supervisor, that is, to gain their approval and relationship closeness. In contrast, individuals who scored low on both anxiety and avoidance (secure working models) recalled fewer negative events than insecure individuals, and no pattern was discernable in terms of event type or theme. It is concluded that individuals may have been more likely to attend to, perceive, and store in memory those aspects of supervisor behaviour that matched their specific working models. Additionally, based on the interview findings and the direct relationship between supervisor caregiving and event interpretation found in Study 3, it seems reasonable to conclude that supervisors who were generally viewed as critical or rejecting may have been more likely to treat their employees in ways that confirmed negative expectations.

1.3 Event Interpretation and Specific Working Models

In general it was expected that, in accordance with negative beliefs and expectations about self and/or other, specific working models would influence the ways in which supervisory relationship events were interpreted. In Studies 3 and 4 specific avoidance was, as expected, strongly associated with a tendency to blame the supervisor for negative relationship events. The picture that emerged with regard to specific anxiety was a little more complex than had been anticipated. Quantitatively, in Study 3, individuals scoring highly on specific anxiety showed no significant trend towards blaming their supervisors. However, this may be explained by the observation that, qualitatively, specific anxiety was associated with confused and conflicting attributions for events, such that supervisors were believed to have acted selfishly but unintentionally, for example. In addition, and consistent with predictions, anxious individuals tended to see themselves as at least partly responsible for the real-life relationship events they described. Overall, taking the results of Studies 3 and 4 together, the findings were broadly in line with expectations, and it can be concluded that differences in specific working models may differentially influence the ways in which relationship events will be interpreted.

1.4 Negative Emotional Reactions and Specific Working Models

It was expected that differences in specific working models would lead individuals to react to supervisory relationship events with different types of negative emotions. In line with these expectations, individuals with anxious specific working models reported experiencing both other-focused, anger emotions (e.g. angry, annoyed, frustrated, hurt, upset) and self-focused, distress emotions (e.g. guilty, embarrassed, ashamed, anxious/worried) in reaction to hypothetical and real-life events. Individuals scoring highly on specific avoidance were more likely to react to relationship events with anger-related emotions than distress-related emotions. This latter finding was a clear trend in the qualitative results, but may have been partly obscured in the survey results by variance shared with global anxiety (also a strong predictor of distress emotions).

The findings regarding intensity of negative emotional reactions were less clear-cut. It was expected that anxiety would be associated with reports of intense emotions, whereas avoidance would lead individuals to deny/suppress strong emotional reactions. Study 3 indicated that, as expected, individuals with relationship-specific anxious working models were more likely to react to hypothetical events with intense negative emotions compared with their avoidant counterparts. In addition, although the interviews did not find clear evidence of extreme emotional reactions for anxious individuals, the fact that they reported experiencing a wide variety of negative emotions in response to each real-life incident was consistent with the predicted greater emotionality. However, the anticipated downplaying of negative emotional intensity was not found for avoidant individuals when they described real-life supervisory relationship events. Overall, there was mixed support for the predicted links between specific working models and emotional intensity, but it can be concluded that individuals scoring higher on specific anxiety may be more likely to experience multiple other-directed and self-directed emotions in response to negative relationship events. In contrast, individuals with higher scores on specific avoidance may predominantly (but not exclusively) experience other-focused, anger-related emotions.

1.5 Specific Versus Global Working Models

Consistent with previous research, the results showed that there was only a modest degree of overlap between specific and global working models. Thus, it can be concluded

that specific and global models largely contain beliefs and expectations about the self and other(s) in relationships at different levels of abstraction, as hypothesised. It was also expected that, relative to global models, specific working models would be the more influential in guiding event interpretation. Study 3 showed that specific working models continued to account for variance in event interpretation after controlling for the influence of global avoidance and global anxiety. Given the non-significant relationship between specific anxiety and event interpretation, the majority of this additional variance was in fact attributable to specific avoidance. Nevertheless, the results provided some support for the hypothesis. Additional, indirect support for the relative importance of specific working models was indicated by the fact that, in Study 4, individuals' attributions for events were generally congruent with predictions based on their specific working models. Thus, it can be tentatively concluded that the way in which individuals interpreted relationship events was guided primarily by their specific beliefs and expectations about the supervisory relationship. However, individuals' more general beliefs and expectations about the self and others also played a significant role, at least with regard to interpreting hypothetical scenarios.

The results of Study 3 provided partial support for the prediction that specific working models would be more important predictors of emotional reactions than global working models. All four dimensions of specific and global attachment played a significant role in predicting emotions. Nevertheless, as predicted, the combined effects of specific avoidance and anxiety accounted for significantly greater variance in overall negative emotions, compared with global models. Closer examination showed that while specific models were the strongest predictors of anger emotions, global models (especially anxiety) were the strongest predictors of distress emotions. Thus, it may be that beliefs and expectations tied to the supervisory relationship in particular are relatively more important in determining other-focused emotions, whereas more general and enduring relationship beliefs are most influential in shaping the experience of self-focused emotions. Overall, it is concluded that both specific and global models may make significant, but different contributions to emotional reactions.

Taken together, the findings regarding the relative contributions of specific and global working models to event interpretation and emotions raised the possibility that the relationships between models and outcomes may be more complex than has hitherto been conceived. It may not simply be the case that one or the other type of model is a stronger

influence in a given situation. Rather, the absolute effects may be subtly different, too. Further research on this issue is warranted.

1.6 Independent Effects Model Versus Interaction Model

Finally, no support was found for an interaction effect between global and specific working models. It can be concluded that the ways in which individuals' specific working models influenced cognition was unaffected by the type of global working models they held. In contrast, partial support was found for the proposed Independent Effects Model of negative emotions in supervisory relationships. Thus, supervisor caregiving predicted overall negative emotions and anger emotions, mediated by the effects of specific avoidance and negative event interpretation. In addition, global anxiety predicted overall negative emotions mediated by negative event interpretation. The fact that mediating effects were not found for specific anxiety and global avoidance may be attributable to the fact that a limited measure of event interpretation was used in the study. Consistent with this, the interview results for Study 4 showed some evidence of a closer link between attributions and emotions for individuals scoring highly on specific anxiety. On the basis of these results, it can be tentatively concluded that employees' experiences of negative emotions in their supervisory relationships are jointly determined by the global working models that they bring with them to the workplace, and the relationship-specific working models that develop as a result of caregiving received in the relationship.

In sum, at least partial support was found for the majority of hypotheses across the four studies. Thus, as a whole, it is concluded that the results regarding the roles of supervisor caregiving and working models (specific and global) in determining cognition and negative emotions were broadly in line with attachment theory predictions.

2. Contribution to Knowledge

Little previous research has investigated the nature and causes of negative emotions at work. Even less is known about employees' experiences of negative emotions in the context of supervisory relationships. The current research represents an important step towards addressing this paucity. At the most basic level, the research adds to our understanding of the types of work-related events that lead to negative emotions. Emotion-eliciting events remain

something of a 'black box' in Affective Events Theory (Weiss & Cropanzano, 1996), and existing research merely suggests that supervisors' actions are a major source of negative emotions (Basch & Fisher, 2000). The present research shows that employees are most likely to experience negative emotions on occasions when their supervisors fail to provide support and assistance, and when they openly criticise, chastise, or interfere with employees' work. While this is an interesting insight per se, the major benefit of the research is that it goes beyond producing a taxonomy of events to illuminate some of the mechanisms that may underlie the link between events and emotions.

Implicit in previous attempts to develop taxonomies of emotion-eliciting events at work is the assumption that, allowing for stable individual differences, the same kinds of events will lead to similar appraisals/interpretations, and in turn similar emotional reactions in most people (Basch & Fisher, 2000; Lazarus & Cohen-Charash, 2001). The present research challenges this assumption with the findings that a) differences in employees' *relationship-specific* beliefs and expectations (i.e. specific working models), may pre-dispose people towards different cognitive and emotional responses to the *same* events, and b) the actual nature of events that lead to negative emotions may *differ* considerably between employees depending on the quality of caregiving they typically receive from their supervisors, and the specific working models they hold of the relationship. Essentially, the present research adds to our understanding of emotions in supervisory relationships by highlighting that negative emotional reactions to events are complex, and they cannot be fully understood outside of the relational context in which they occur.

The key contribution of the present research is in developing, and finding broad support for, a new relational theory of negative emotions in supervisory relationships. By drawing upon attachment theory it has been possible to develop a model that places emotional responses to a supervisor's actions in the context of an employee's specific relationship history with their supervisor (specific working models), as well as their more general relationship experiences (global working models). The model explains how specific working models develop in response to repeated interactions with the supervisor, who serves as the primary organisational caregiver for employees. Within this framework biases in the cognitive processes underlying working models, including event perception and interpretation, are viewed as the core mechanisms linking relationship events and emotional responses. Thus, from an attachment theory perspective, it is the symbolic meaning

associated with events, rather than the events themselves that may lead to negative emotions (Collins & Read, 1994). Events are evaluated in terms of their implications for the supervisory relationship, the extent to which relational goals (e.g. closeness, trust) are threatened, and the extent to which expectations about the self and other in the relationship are confirmed. From this perspective, research designs that simply develop taxonomical accounts of events and emotional outcomes may be missing valuable information, leading to erroneous conclusions about the causes of negative emotions at work.

The proposed attachment theoretical perspective extends existing theories of emotions at work, especially AET (Weiss & Cropanzano, 1996) and cognitive appraisal theories (e.g. Lazarus & Cohen-Charash, 2001) that have not explicitly addressed the role of relational context in determining emotions. Moreover, on the basis of the preliminary evidence presented in this thesis, the Independent Effects framework shows promise as a tool for helping to predict when (and why) employees are likely to experience a range of anger-related and distress-related emotions in their supervisory relationships. This is an important advance in our understanding of the causes of negative emotions at work.

Finally, as well as contributing to theory and research on emotions at work, the present research extends existing operationalisations of attachment theory. Traditionally, attachment theory has been used as a framework for understanding a range of outcomes in familial or romantic relationships. More recently the concept of attachment working models has been applied to broader social relationships (e.g. teachers, therapists), but not to supervisory relationships. Furthermore, with the exception of Kahn's work (1993; 1998) the supervisory relationship has not previously been conceptualised as a caregiving relationship. This programme of research has demonstrated that the concepts of caregiving and attachment working models are relevant to the supervisory relationship. This is supported by findings indicating that, in line with attachment theory predictions, supervisor caregiving predicts specific working models, and these (in conjunction with global working models) are systematically associated with cognitive and emotional responses in supervisory relationships.

3. Caveats and Limitations

The caveats and limitations specific to each study were discussed in previous chapters. This section focuses on broader issues that pervade the research and may influence its

interpretation as a whole. A common theme throughout has been that the results of the research may have been affected by common method variance (all data were based on self-report) and the cross-sectional nature of the studies' designs. Common method variance may either inflate or attenuate correlations between variables (Conway, 2000). Data collected at a single point in time does not allow inferences about causality, or the direction of relationships (Robson, 1993). Thus, caution is necessary when drawing conclusions about the size and direction of the observed relationships between variables in the present research.

The research relied on retrospective and hypothetical reports of emotional experiences. An obvious drawback of the hypothetical method, as cited earlier, is that imagined responses to hypothetical events may not accurately reflect how individuals would really feel in a given situation. On the one hand, when used with emotionally aware respondents hypothetical judgements may provide a reasonable approximation of reality (Kline, 2000). On the other hand, hypothetical judgements may be influenced by respondents' mood at the time of completing the questionnaire (Neumann, Seibt & Strack, 2001), as well as socially desirable responding and lack of self-knowledge (Kline, 2000).

The interviews were an improvement on the hypothetical approach because they focused on individuals' actual emotional experiences. However, emotions are by definition transient, and this may have made it difficult for interviewees to accurately recall their feelings up to twelve months after the events had occurred. Indeed, a large number of studies have shown that people tend to overestimate the intensity of past emotional reactions and underestimate their frequency (Fisher, 2002). Retrospective reports of emotions can also be contaminated by pre-existing mood at the time of recall. For example, mood-congruent emotions may be recalled as more intense, and mood-incongruent emotions may be recalled as less intense than was actually the case (e.g. Neumann, Seibt & Strack, 2001; Teasdale & Fogarty, 1979). Finally, Levine, Prohaska, Burgess et al. (2001) found that emotions recalled in relation to past events changed over time, being reconstructed on the basis of *current* appraisals of the situation rather than the actual appraisals that were made at the time of the events. In the present studies there is no way of determining the extent to which participants' self-reports were affected by any of these factors. Many of the findings fitted the theoretical predictions, however it is important to keep in mind that the results may have been affected by one or more of the above.

A question that readers might ask is: might the findings regarding emotional reactions in fact be explained by individual differences in trait affectivity (NA and PA) or the corresponding Big Five dimensions, Neuroticism and Extroversion (McCrae & Costa, 1987)? Previous research suggests that this is not the case. Griffin and Bartholomew (1994) and Shaver and Brennan (1992) found that insecure global working models were quite strongly correlated with Neuroticism (proneness to experience unpleasant emotions). However, the attachment dimensions of anxiety and avoidance uniquely predicted relationship outcomes such as satisfaction and commitment, after Neuroticism and the other Big Five factors had been taken in to account. Shaver and Brennan (1992) concluded that attachment dimensions have greater predictive power for investigating relationship relevant outcomes, and although they are meaningfully related to Neuroticism they cannot be reduced to, or represented by this or other facets of the Big Five. For the purposes of the present research, measuring global working models was therefore the most theoretically appropriate and parsimonious means of representing the anticipated influence of stable individual differences on emotional outcomes. Unfortunately, the extent to which supervisor-specific working models are related to broader personality constructs is as yet unknown. Given that the relationships between specific and global working models was modest overall, one would not expect substantial overlap between specific models and NA or Neuroticism, for example. Nevertheless, until further research can be conducted to verify this matter, it is necessary to keep in mind that the results may have been influenced by unmeasured personality traits, if only to a small degree.

A potential limitation of the research design is that data were only collected from one member of the employee-supervisor dyad. Because of this, we only have 'one side of the story', and it is difficult to know how closely employees' perceptions of their supervisors' behaviour matched the supervisors' perceptions. On the other hand, comparisons of victim and perpetrator accounts of interpersonal conflicts have shown that: victims are motivated to reconstruct events to validate their grievance and gain sympathy; perpetrators are motivated to reconstruct the same events in ways that help them avoid guilt or shame (Baumeister, Stillman & Wotman, 1990). Thus, had it been feasible to obtain such data in the present study, one would not expect a close correspondence between employees' and supervisors' perceptions/accounts of negative relationship events, nor supervisor caregiving in general.

Nevertheless, this issue raises a more fundamental point concerning the 'truth' of individuals' perceptions of supervisor caregiving as compared with a more objective reality

(e.g. observer ratings). In particular, did the supervisors of individuals with insecure working models behave exactly as reported, and is this the behaviour that led to the development of individuals' specific working models? Or were reports of supervisor caregiving confounded by the biases inherent in the pre-existing specific working models? The latter possibility cannot be completely ruled out because the data were all self-report and cross-sectional. However, Kirmeyer & Lin (1987) found significant correlations of moderate size between employees' perceptions of social support at work and observer ratings of actual face-to-face interactions with peers and superiors. In addition, the multi-level design and analysis of Study 3 means that the findings were effectively based on multiple ratings of 48 supervisors. Most importantly, existing theory and research support a causal link between caregiving and working model development (Bakermans-Kranenburg, Van IJzendoorn & Juffer, 2003). Together these factors suggest that the caregiving - specific working model relationship observed here cannot simply be accounted for by a reverse causality effect of working model biases. However, given the problems inherent in the research design, conclusions must remain tentative until further research using longitudinal and/or observational methods can be conducted.

In the description of access negotiation for Studies 3 and 4 (Chapter 7) it was noted that the research organisation was characterised by a fairly traditional 'workers vs. management' culture that the new CEO and others had only recently begun to try and change. What might be the implications of this for the research findings? On the one hand, despite assurances about the independence of the researcher, it may be that the nurses were suspicious of organisational efforts to encourage participation in the survey and interviews, viewing them as a means of management control or spying. This may have prevented many people from taking part in the research. Indeed this may be one reason why the response rate was not higher than 33%. If this were the case, the results may have been biased toward a more positive view, for example masking the true levels of avoidance and anxiety present in the organisation and perhaps attenuating ratings of negative interpretations and emotional reactions. On the other hand, the results may have been negatively biased if a disproportionate number of the respondents 'had an axe to grind' and were predisposed to rate their supervisors in a negative light. Unfortunately, there were no data available with which to ascertain whether the respondents differed significantly from the non-respondents. The mean scores on SCS and specific attachment were not skewed to any great extent either

positively or negatively, so it does not appear that the context noticeably biased the findings. Nevertheless, we do not know if the findings are representative of the sample population.

Finally, the results of the research should be generalisable to nurses working in other NHS Trusts (with the caveat that there may be some cultural/contextual differences between organisations). However, until further research has replicated the findings using a more heterogeneous sample in terms of gender and occupation, a question mark must remain concerning generalisability to the wider population of employees and their supervisors.

4. Future Research

Because the current research is effectively the first of its kind, there is much scope for future research. An important first step will be to further develop the Supervisor Caregiving Scale to ensure that it is as valid and reliable a measure of the construct as possible. The research indicated, for example, that the scale might be improved by adjusting the balance of items in order to better encapsulate the behaviours of anxious individuals' supervisors (e.g. criticism/disapproval and lack of prioritisation of employee welfare). Modifications to the scale should be validated against existing measures of theoretically related constructs such as employee perceptions of transformational leadership and supervisory support.

In order to overcome the common method problem, validation research could also examine whether the SCS is correlated with supervisors' self-reports of their own emotional intelligence and global working models. Previous research has shown that security of individuals' global working models predicts the caregiving they provide in their relationships (e.g. Kunc & Shaver, 1994). Security of supervisors' global working models also positively predicts employees' perceptions of the theoretically related construct of transformational leadership (Popper, Mayseless & Castelnovo, 2000). Finally, like supervisor caregiving, emotional intelligence incorporates the notion of individuals' ability to perceive, understand and regulate others' emotions (Mayer & Salovey, 1997). Therefore, significant correlations would be expected between these variables and the SCS.

A third means of verifying the construct validity of the SCS would be to correlate employee self-reports of supervisor caregiving with independently rated observations of caregiving behaviours. For example, using the operationalisation of supervisor caregiving

developed here, researchers could develop behaviourally anchored rating scales similar to those used by Ainsworth et al. (1978) during their home observations of maternal caregiving. Researchers could film supervisors during repeated interactions with target individuals, and use the video footage to assess the caregiving behaviour they observed. A drawback inherent in overt observational studies is the risk of sparking the 'Hawthorne Effect' – that is, researchers may unwittingly change the behaviour they are trying to observe by the very fact of being present (Robson, 1993). However, given the current popularity and pervasiveness of the 'reality TV' culture, it may be that organisations and the target supervisors would be a little more open to negotiating access for observational research, and more comfortable with being filmed.

In a similar vein, given that this research is the first to operationalise the concept of supervisor-specific working models, it would also be useful to gather further information regarding its construct validity. The results of the present research can be taken as preliminary evidence of the validity of the construct. Nevertheless, further research should examine the associations between supervisor-specific working models and variables such as trait affectivity, the Big Five personality factors, trust, and self-esteem in order to clearly demarcate the conceptual territory occupied by specific working models in supervisory relationships. Ideally, researchers would also seek to validate employee self-reports against observable behavioural outcomes. For example, can individuals scoring highly on avoidance or anxiety be seen to actively pursue the interaction goals associated with their working models?

Following this in-depth developmental work, future studies should attempt to replicate the findings of the present research in diverse organisational settings with large and diverse samples of individuals. It is important to ascertain whether similar results regarding the relationships between working models, interpretation, and emotions would be obtained when more men, from a range of occupational groups and levels are included in the sample. Note that it is not only important to balance the proportions of male and female respondents, it is also important to ensure a gender balance among the supervisors who are rated, given that most supervisors in the samples for Studies 3 and 4 were female. Researchers should pay careful attention to the ordering of scales in future survey work, ensuring that they include more general measures (e.g. global working models) at the beginning of the questionnaire, followed by the more specific measures. Ideally, researchers would adopt more reliable

methods for assessing the nature of negative relationship events and reactions to them. For example, real-time methods such as event sampling (ESM) and structured diaries are increasingly used in emotions research because they reduce the problem of biases associated with the recall of emotions (Fisher, 2002). An issue that deserves particular attention in this replication phase is whether the relationship between supervisor caregiving and specific anxiety is small and negative as found in Study 2, or small and positive as found in Study 3. As discussed in Chapter 8, a longitudinal research design may be the most appropriate means of resolving this issue.

The overall model developed to guide the research (i.e. Independent Effects model) is probably an over-simplification of the complex processes involved in the development of attachment working models in supervisory relationships, and their consequences for employees' emotional experiences. Nevertheless, future researchers should use it as a starting point and then investigate how the model might be refined and extended. For example, the present research did not incorporate a feedback loop between emotional reactions and specific working models, but to do so would be fully consistent with attachment theory (Bowlby, 1969). Research designed to investigate this link (e.g. a longitudinal diary study) would help to build a picture of the dynamism of supervisory relationships, and negative emotional experiences within them.

Another issue worthy of greater attention is the role of global working models in determining cognitive and emotional outcomes. For example, Study 3 indicated that the relative influences of global and specific working models may be more complex than a weaker/stronger version of the same effects, and more research is needed to unravel this issue. In addition, the present research provided only a snapshot in time, but suggested that global anxiety was a strong influence on self-focused, distress emotions. Attachment theorists argue that the influence of global models should be greatest at the beginning of a new relationship, before the specific model has been formed (Collins & Read, 1994). It would therefore be interesting to compare the influence of global working models on interpretation and emotions at the beginning of a new supervisory relationship and, say, 6 months later when the specific models should be well established. In particular, one would expect to find that global avoidance, as well as anxiety, played a stronger role in the early stages of the relationship.

Future researchers might also expand the model to incorporate additional factors that may determine individuals' cognitive and emotional reactions to events in their supervisory relationships. For example, specific working models may not be the only source of contextually relevant interpersonal expectations. Individual differences in implicit leadership theories (ILTs) – the traits that people associate with 'leadership' (e.g. Lord & Maher, 1991) – may also play a key role. Indeed, Keller (2003) argues that global working models shape individuals' implicit leadership theories because parental relationships form the basis for individuals' expectations about what constitutes leader behaviour. Thus, it may be that ILTs underlie the relationship between global working models and event interpretation.

The present research developed an attachment theory model to explain and predict a particular class of work-related outcomes, namely employee negative emotions. However, the same framework might also be extended to understand job attitudes and behaviours, for example, employee commitment, job satisfaction, and performance. Specifically, attachment theorists suggest that the different emotional reactions associated with different working models may in turn lead to differences in behaviour (Collins & Read, 1994). Similarly, Affective Events Theory (Weiss & Cropanzano, 1996) predicts that, in the short term, negative emotions influence behaviour, while in the longer term more negative job attitudes may result. Thus, future research using diary and/or longitudinal methods should systematically investigate whether supervisor caregiving, attachment working models (specific and global), and negative emotions influence a range of work-related behaviours and attitudes.

Note that the model guiding the present research did not incorporate the influence of any job-related variables (e.g. role conflict, job overload). This is because the literature revealed that working relationships (especially supervisory relationships) were, by comparison, the dominant source of negative emotions in the workplace (e.g. Basch & Fisher, 2000). However, it may well be that relative to the influence of specific and global working models of relationships, job-related factors play a more important role in predicting job satisfaction, performance etc. Therefore, it would be important to expand the research model to include other relevant variables, in order to establish the relative contributions of attachment and task factors to job attitudes and behaviours.

In sum, future research should begin by strengthening our knowledge regarding the key constructs that are the building blocks of an attachment theory perspective of employee negative emotions. Following this, research should focus on replicating and extending the findings of this thesis so that we might draw more confident conclusions about the causes of employee negative emotions in supervisory relationships. Finally, future researchers might wish to expand the proposed theoretical model in order to explore in greater depth the antecedents of negative emotions, as well as a range of other work-related outcomes.

5. Practical Implications

Previously, the literature review highlighted the growing evidence that, in the longer term, repeated experiences of negative emotions at work may be associated with a range of adverse outcomes for both individuals and organisations (Buunk, De Jonge, Ybema & De Wolff, 1998; Fisher, 2000; George & Brief, 1996; Kahn, 1993; 1998; Spector & Fox, 2002). Thus, it is clearly in the interests of managers to attempt to reduce the incidence of negative emotions in their organisations. Of course, there are many sources of negative emotions at work that have not been investigated as part of this research (e.g. co-workers, job demands etc.). However, the findings of this research have clear practical implications for organisations wishing to manage what is evidently a key cause of negative emotions – the supervisory relationship. Overall, the results suggest that when employees experience their supervisors as consistently warm, sensitive, and responsive, they are more likely to be securely attached in their relationships and, as a result, less likely to experience negative emotions. Therefore, organisations should actively promote the provision of high quality caregiving by all staff with supervisory or managerial responsibility. This could be achieved via several HR mechanisms. In particular, the construct of supervisor caregiving developed for this research should be applicable to training and development, and appraisal; and both supervisor caregiving and the construct of global attachment could be applied to recruitment and selection.

5.1 Training and Development

Organisations could promote effective supervisor caregiving through the development and implementation of staff training and development initiatives. Research in the child development literature indicates that parental caregiving is a skill set that can be learned

(George & Solomon, 1999). Furthermore, intervention studies have reliably found that enhancing parental caregiving skills through training is effective in improving infants' attachment security (Bakermans-Kranenburg, Van IJzendoorn & Juffer, 2003). Evidence also suggests that training need not be intensive – a small number of sessions based on skills training and changing parental perceptions of their role as caregiver produce observable changes in parental behaviour and child attachment security (Bakermans-Kranenburg, Van IJzendoorn & Juffer, 2003; George & Solomon, 1999).

On the basis of this evidence, organisations could develop short training courses (e.g. a few days) aimed at enhancing supervisors' caregiving skills. The present research provides a clear indication of the types of behaviours that constitute good supervisor caregiving. Specifically, supervisors who are effective caregivers:

- Maintain awareness of employees' problems, needs, and concerns
- Show a genuine interest in employees' well-being
- Are accessible, understanding and responsive when employees turn to them for help or advice on work and/or personal issues
- Adopt a collaborative and appropriate approach to solving employees' problems
- Have a friendly, accepting interpersonal style and treat all employees equally

Training could begin by examining and challenging supervisors' views about their role as organisational caregivers. It may be, for example, that the supervisors of insecurely attached employees do not view caregiving as an important role, or even as part of their job description. Changing these perceptions may be an important first step if behavioural change is to follow (George & Solomon, 1999). Training could then move on to cover:

- Information about the principles of effective supervisor caregiving, and its consequences for employees, psychologically and emotionally
- Training in listening and counselling skills
- Practice in applying caregiving skills through role-playing

Evaluation of the success of the training could involve, for each trainee, obtaining ratings of employee perceptions of their supervisor caregiving, a) immediately prior to the training and b) 3 and 6 months post-training. In addition, organisations should monitor employee perceptions of supervisor caregiving on an annual basis. This could be achieved by

including the SCS in an annual staff opinion survey (which could also collect data on frequency of employee negative emotions and other organisationally important outcomes).

The benefits of monitoring would be:

- Ongoing evaluation of the success of training
- Measurement of improvements year on year
- Highlighting problem areas that might benefit from further intervention
- Reinforcement of the value placed by the organisation on the caregiving role

5.2 Appraisal

Instances of good caregiving practice should be recognised and rewarded at all levels of the organisation via an appraisal system. Specifically, for all individuals with supervisory roles, quality of supervisor caregiving could be incorporated into appraisal systems as a dimension of effective performance. In order to assess individuals' performance on the caregiving dimension, the Supervisor Caregiving Scale could easily be adapted for use in a 360-degree feedback system of appraisal. For example, the SCS could be re-worded so that individuals' caregiving behaviour is rated by their own supervisors/managers and co-workers, as well as by their subordinates. The results of these multiple perceptions could then be used to pin-point good caregiving that should be rewarded, as well as any areas of behaviour that require further training or development.

The implementation of such a system should help to reinforce the use of sensitive, responsive caregiving behaviours and, over time, should generate a climate for caregiving. Indeed, Kahn (1998) argues that organisations are made up of a network of caregiving relationships. As such, it is important that, if supervisors are to establish effective and supportive working relationships with their employees, their own supervisors/line managers are supportive of their efforts and demonstrably concerned for their well-being. In other words, the caregivers need good caregiving too, and this implies that organisations may be most successful in reducing a major cause of employee negative emotions if they develop a climate for caregiving. Appraisal may be an effective means of achieving this.

5.3 Recruitment and Selection

Another possible application of the present research is to use the constructs of supervisor caregiving and global attachment in recruiting and selecting candidates for supervisory roles. For example, supervisor caregiving skills could be assessed in an assessment centre via the use of role-plays, or by group discussions of employee-supervisor interaction scenarios (e.g. 'what should the supervisor do in the following situation?'). In addition, the evidence reviewed earlier showed that global attachment predicted the quality of caregiving that adults provided for their romantic partners (e.g. Feeney, 1996; Kunc & Shaver, 1994). Further research is needed to see if a supervisory candidate's levels of global anxiety and avoidance predict subsequent employee perceptions of their supervisor caregiving. However, if a reliable association were found, it might be possible to use the global attachment measure as part of a battery of psychometric measures in an assessment centre. Thus, employing individuals on the basis of their (potential) supervisor caregiving abilities could provide another means by which organisations may be able to reduce the incidence of employee negative emotions, and the associated individual and organisational costs.

In sum, the research findings suggest that organisations may reduce the incidence of employee negative emotions by improving the quality of caregiving provided by supervisors at all levels. The concepts and measures developed in the present research have clear practical applications to training and development, appraisal, and selection processes. It is through such processes that organisations may hope to change and maintain supervisors' behaviour towards their employees. However, it should be noted that in order for these measures to succeed, it may first be necessary to challenge the assumptions of supervisors (and senior decision-makers) regarding the nature of the supervisory role. For example, it may be that individuals operate according to different implicit theories of the supervisory role, such that acting as the primary organisational caregiver for employees either does not feature, or is of relatively little importance compared to, say, directly managing employee task performance in the pursuit of productivity. Further research is therefore needed in order to discover, and address, any potential barriers to the practical applications of the research.

6. Conclusion

Negative emotion in the workplace is an important issue that merits greater research attention than it has hitherto received. Previous research has shown that the supervisory relationship is a major source of employee negative emotions, but next to nothing is known about why this is so. This thesis adds to our limited knowledge about the nature and causes of employee negative emotional experiences in this key working relationship. By drawing on attachment theory, the supervisor role can be conceptualised as a salient and significant interpersonal relationship in which employees develop differing attachment working models based on the quality of caregiving they receive from their supervisors. Attachment working models represent beliefs and expectations about the self and other in the relationship and are viewed as guiding employee interpretations and emotions when they interact with their supervisors.

Until additional research has been undertaken to replicate the findings of this research conclusions must remain tentative. Nevertheless, broad support was found for the theory. These findings offer preliminary indications that, in response to rejecting, critical, or inconsistent caregiving employees may develop insecure working models (high anxiety and/or avoidance) of their supervisory relationships. Employees who hold insecure specific working models are concerned about issues such as lack of trust or closeness in their supervisory relationships. They seem sensitised to these issues and are more likely to report negative interactions with their supervisors that contain these underlying themes. As a result, insecure employees more frequently experience negative emotions at work. More specifically, insecure working models may lead individuals to perceive and interpret their supervisors' actions in a manner consistent with their negative interpersonal expectations - blaming their supervisors or, in the case of anxious attachment, themselves for events. In turn, differences in interpretations may be associated with differences in the number, type and intensity of negative emotions experienced. In addition to the effects of specific working models, interpretation and emotions appear to be influenced jointly (but generally to a lesser degree) by the more stable, global working models of relationships in general which employees bring with them to the workplace.

This research helps to illuminate the nature and causes of employee negative emotional experiences in supervisory relationships. Additionally, the theory and findings presented here

carry a broader message concerning the importance of human relationships to individual functioning. According to Baumeister and Leary (1995) all humans have a fundamental 'need to belong' (p. 497). That is, they are motivated to form strong, stable relationships that are characterised by frequent, positive social interaction. Thus, when supervisors withhold sensitive and responsive caregiving from their employees they not only deprive them of a safe haven to turn to for protection in times of need. Uncaring supervisors may also deprive their employees of the sense of belongingness that is key to individual health and well-being (Baumeister & Leary, 1995). Moreover, the impact on belongingness may spread beyond the boundaries of the supervisory dyad because 'hierarchical superiors, by definition, represent their organizations to their subordinates. When superiors give or withhold care, subordinates experience it as systemic as well as personal. They feel cared for or withheld from by their organizations, as represented in the persona of their formal superiors' (Kahn, 1993, p. 561). Thus, above and beyond the impact on emotional experiences, the nature of an individual's caregiving relationship with their supervisor may have profound consequences for the quality of an individual's experience of work and life in general.

Although there are clearly other sources of negative emotions at work that were not the focus of this research, training supervisors in caregiving skills, and the importance of the caregiving role as part of effective leadership, may form part of the solution to reducing the individual and organisational costs of employee negative emotions. First however, much more research is needed to test all aspects of the attachment theory perspective of negative emotions in supervisory relationships. The present research has provided some preliminary evidence, a theoretically driven model, and a measure of supervisor caregiving, with which to begin the task. Nevertheless, further research will only be viable and beneficial when researchers and managers alike recognise that negative emotions, and supervisor caregiving in particular, are important organisational issues.

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Appendix 1: Study 1 - Supervisor Caregiving Scale Development

Original pool of 30 items

Awareness

My supervisor shows an interest in my well-being
My supervisor notices when I am feeling down or stressed
My supervisor keeps up to date with my needs and concerns
My supervisor often forgets personal conversations we have had **(R)**

Understanding

My supervisor finds it hard to understand me **(R – ARM)**
My supervisor accurately perceives my needs and concerns
My supervisor is good at seeing things from my perspective
My supervisor shows s/he understands my feelings

Promptness

Whenever humanly possible, my supervisor provides support without delay
My supervisor responds promptly when I request help or advice
If my supervisor cannot act immediately to help me with a work problem, s/he tells me what she plans to do
My supervisor does not respond to my requests for support as quickly as I would like **(R)**

Appropriateness

My supervisor knows that, sometimes, just being there for me is the best form of support
If anything can be done to help me resolve a work problem, my supervisor will take the most suitable course of action
My supervisor often does not deal appropriately with my concerns **(R)**

Acceptance

My supervisor accepts me no matter what I say or do **(ARM)**
My supervisor is critical of me **(R)**
My supervisor is warm and friendly with me **(ARM)**
My supervisor often seems irritable or impatient with me **(ARM)**
With my supervisor, I can freely express the things that are worrying me **(ARM)**

Collaboration

My supervisor and I work together to identify solutions to my problems
My supervisor expects me to take responsibility for my problems, rather than be dependent on him / her **(ARM)**
In response to my concerns about work, my supervisor follows his / her own plans, ignoring my views of how to proceed **(R – ARM)**

Accessibility

My supervisor always tries to make time for me, no matter how busy s/he is
My supervisor is always happy to sit and listen if ever I have any worries
My supervisor is often too busy to see me **(R)**
My supervisor is not really interested in discussing my concerns **(R)**

Consistency

My supervisor's behaviour towards me is consistently sensitive
I can never be sure how my supervisor will react when I go to him/her with a problem **(R)**
I know that my supervisor is likely to be cold or disinterested if I approach him/ her for support **(R)**

N.B. ARM = items adapted from Agnew Relationship Measure (Agnew-Davies, Stiles, Hardy, Barkham, Shapiro, 1998)

Appendix 2: Study 1 – Materials used to rate initial SCS items

Instructions to Raters

Thank you for sparing the time to help me develop a measure of Supervisor Caregiving (for use in my doctoral research). The procedure to be followed is set out below. The task should take 20-30 minutes to complete. Please could you return your completed pack to me / my pigeon-hole by **Tuesday 28 November, 5pm**. If you have any queries about any aspect of the process please don't hesitate to call me (xxxxxxx).

Preparation

- Carefully read the dimension definitions provided (sheet D).
- Carefully read through each of the statements on the separate slips of paper.

Sorting

- Try to match each statement to the dimension you think it best belongs to. To do this, please *manually* sort the statements into *piles* – one pile for each of the dimensions.

Note: Some of the statements are '*reversed*' – that is they are intended to be negative or opposite expressions of a given dimension. To give an example from an existing scale:

'I feel very comfortable being close to romantic partners'

This is a reverse-coded item for a dimension defined as 'avoidance of closeness and intimacy'

- If you think that a statement does not belong to any of the listed dimensions create a new category. Please make a note on the slip to indicate why you have made this decision.
- Should you not understand a statement (e.g. you find it ambiguous or confusing), or if you have comments about the way a statement is worded, please note this directly on the relevant slip of paper.

Rating

When you have sorted all of the statements you are ready to complete the feedback sheet (labelled F)

Systematically work through each pile doing the following:

1. Locate each statement on the sheet
2. Circle the dimension to which you have allocated the statement
3. Rate how well you think the statement *fits*, or is relevant to, the chosen dimension. Circle a number on the scale to indicate your response.

In the case of any statements that you were unable to match, circle 'other' and 'na'.

Please do not try to complete the feedback sheet without first sorting the statements into piles by hand. This is a very important part of the process.

The following dimensions are hypothesised to form the construct of '*Supervisor Caregiving*'. This refers to an employee's perception that her/his supervisor is attuned to her/his feelings, needs and

concerns, and that, given this understanding, the supervisor will respond appropriately, and promptly to any signals of distress. The sensitive - responsive supervisor is accepting of the employee and always accessible, both physically and psychologically. The supervisor can be depended upon to respond to the employee's requests for support in a consistently positive manner that is never intrusive or controlling.

Dimensions

A *Awareness*

The employee believes that the supervisor is aware of, and attuned to, her/his feelings, needs and concerns. The supervisor is perceived to actively maintain this level of awareness about the employees' well-being.

B *Understanding*

The employee believes that her/his supervisor is relatively empathic. The supervisor is therefore able to accurately interpret and understand the employee's experiences, feelings and concerns.

C *Promptness*

In times of need, the employee believes that the supervisor will act quickly to acknowledge and /or deal with her/his concerns. The supervisor's reaction is (as far as possible) contingent with the distress signal, rather than delayed or belated.

D *Appropriateness*

In dealing with the employee's concerns, the supervisor is perceived to take whatever actions seem most appropriate to the situation. Sometimes taking no action may be most the most appropriate response - if the employee simply needs is to talk things through, for example.

E *Acceptance*

The employee feels accepted by the supervisor, as opposed to rejected or emotionally excluded. Acceptance is, in part, experienced through the supervisor's interpersonal style when interacting with the employee.

F *Collaboration*

The supervisor is perceived to take the employee's wishes into account when the employee seeks solutions to her/his concerns. That is, the supervisor respects the employee's independence and ownership of the problem, and does not try to intrude or take control.

G *Accessibility*

Despite other demands on her/his time, the supervisor is perceived to be available, both physically and psychologically, when the employee needs to see him/her with a problem. Thus, the supervisor's attention can be easily accessed, and s/he appears genuinely willing to support the employee as necessary.

H *Consistency*

The employee can rely on the supervisor to consistently respond to her/him in a sensitive manner.

N.B. If you have any comments about these definitions, feel free to annotate this sheet and continue over the page if necessary. Thank you.

Rating Form

| | | Dimension | Conceptual Relevance / Fit | | | | | |
|---|---|--|----------------------------|------|--------------|------|-----------|----------------|
| | | Please circle appropriate option | Very Poor | Poor | Satisfactory | Good | Very good | Not applicable |
| A | My supervisor shows an interest in my well-being | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| B | My supervisor accepts me no matter what I say or do | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| C | My supervisor finds it hard to understand me | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| D | My supervisor and I work together to identify solutions to my problems | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| E | Whenever possible, my supervisor provides support without delay | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| F | My supervisor is often too busy to see me | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| G | If anything can be done to help me resolve a work problem, my supervisor will take the most suitable course of action | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| H | I can never be sure how my supervisor will react when I go to him/her with a problem | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| I | My supervisor notices when I am feeling down or stressed | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |
| J | My supervisor is critical of me | <i>A B C D</i> <i>E F G H</i> <i>Other</i> | 1 | 2 | 3 | 4 | 5 | na |

| | | Dimension | Conceptual relevance / Fit | | | | | |
|---|---|----------------------------------|----------------------------|------|--------------|------|-----------|----------------|
| | | Please circle appropriate option | Very Poor | Poor | Satisfactory | Good | Very Good | Not Applicable |
| K | My supervisor accurately perceives my needs and concerns | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| L | My supervisor expects me to take responsibility for my problems, rather than be dependent on him / her | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| M | My supervisor responds promptly when I request help or advice | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| N | My supervisor is always happy to sit and listen if ever I have any worries | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| O | My supervisor often does not deal appropriately with my concerns | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| P | My supervisor's behaviour towards me is consistently sensitive | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| Q | My supervisor keeps up to date with my needs and concerns | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| R | My supervisor is warm and friendly with me | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| S | My supervisor is good at seeing things from my perspective | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| T | In response to my concerns about work, my supervisor follows his / her own plans, ignoring my views of how to proceed | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |

| | | Dimension | Conceptual Relevance / Fit | | | | | |
|----|--|---|----------------------------|-------------|---------------------|-------------|------------------|-----------------------|
| | | <i>Please circle appropriate option</i> | <i>Very Poor</i> | <i>Poor</i> | <i>Satisfactory</i> | <i>Good</i> | <i>Very Good</i> | <i>Not Applicable</i> |
| U | If my supervisor cannot act immediately to help me with a work problem, s/he tells me what she plans to do | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| V | My supervisor is not really interested in discussing my concerns | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| W | My supervisor knows that, sometimes, just being there for me is the best form of support | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| X | I know that my supervisor is likely to be cold or disinterested if I approach him/ her for support | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| Y | My supervisor often forgets personal conversations we have had | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| Z | My supervisor often seems irritable or impatient with me | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| Aw | My supervisor shows s/he understands my feelings | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| Bx | My supervisor always tries to make time for me, no matter how busy s/he is | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| Cy | My supervisor does not respond to my requests for support as quickly as I would like | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |
| Dz | With my supervisor, I can freely express the things that are worrying me | A B C D E F G H Other | 1 | 2 | 3 | 4 | 5 | na |

Appendix 3: Study 1 - Questionnaire

A Survey of Employee-Supervisor Relationships

What is this survey?

This is a survey of employees' experiences of their working relationships with their supervisors. We are interested in your views about the interpersonal side of your relationship with your supervisor or boss. The questionnaire will take about 15-20 minutes to complete.

Please complete the questionnaire with reference to your **current** supervisor or boss. Full-time students please refer to your **last** (i.e. most recent) supervisor. We want to know your personal views on the issues raised in the questionnaire. Try to visualise your supervisor before you begin the questionnaire. Please read each question carefully, but give your immediate response.

What is covered in this survey?

The questionnaire is divided into four sections.

- Section 1:** Asks for background details about you and the job you do / did. It is particularly important for us to have this information to help us analyse the questionnaire.
- Section 2:** Asks for your views about your relationship with your supervisor.
- Section 3:** Concerns your experiences of relationships with other people in general.
- Section 4:** Asks about emotions experienced in your working relationship with your supervisor.

Who will see my answers?

The information you give is totally **anonymous**. We do not ask for your name or other identification. Only the researchers will see your completed questionnaires. The information will be collated in such a way that it will not be possible to identify individual responses.

How should I respond?

For the majority of questions, you are asked to tick **one** response that best fits your views.

For example: if you think your supervisor has a slight knowledge of your work preferences:

| <i>Strongly Disagree</i> | <i>Disagree</i> | <i>Slightly Disagree</i> | <i>Neutral / Mixed</i> | <i>Slightly Agree</i> | <i>Agree</i> | <i>Strongly Agree</i> |
|------------------------------|-----------------|------------------------------|----------------------------|---------------------------|--------------|---------------------------|
|------------------------------|-----------------|------------------------------|----------------------------|---------------------------|--------------|---------------------------|

My supervisor
knows my likes
and dislikes

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

Do not spend too long on any question. Answer immediately, according to your **first reaction**.

Please read each question carefully and answer every question.

Thank you.

SECTION 1: Background Details

It is important that we know some of your background details. This will enable us to compare the experiences of different groups of employees.

1. About you

| | | |
|----------------------------------|--|--|
| Age: _____ (yrs) | Are you: (Tick) Male <input type="checkbox"/> Female <input type="checkbox"/> | Nationality (your country of birth): _____ |
| Ethnic Background: (Tick) | | |
| Bangladeshi | <input type="checkbox"/> | Indian <input type="checkbox"/> |
| Black-African | <input type="checkbox"/> | Pakistani <input type="checkbox"/> |
| Black-Caribbean | <input type="checkbox"/> | White <input type="checkbox"/> |
| Black- other | <input type="checkbox"/> | |
| Chinese | <input type="checkbox"/> | Other _____ |

2. About your job

| | |
|--|---|
| a) Job title (<i>Full-time students please state for last job</i>): _____ | |
| b) Occupational level: (Tick) | |
| Top – chief executive, chairperson <input type="checkbox"/> | First level management <input type="checkbox"/> |
| Senior executive <input type="checkbox"/> | Staff <input type="checkbox"/> |
| Upper-middle management / Professional <input type="checkbox"/> | |
| Middle management / Professional <input type="checkbox"/> | Other _____ |
| c) Length of time in this job: _____ (yrs/ months) | |
| d) Length of time in the organization: _____ (yrs / months) | |
| e) Type of contract: (Tick) Part-time <input type="checkbox"/> Full-time <input type="checkbox"/> | <u>UNDERGRADUATE STUDENTS ONLY</u> Was this job your placement (3rd year)? Yes <input type="checkbox"/> No <input type="checkbox"/> |

3. About your Supervisor: This should be your current, or most recent supervisor.

| | |
|---|---|
| Is your supervisor: (Tick) Male <input type="checkbox"/> Female <input type="checkbox"/> | For how long has this person been your supervisor? _____ (yrs / months) |
|---|---|

SECTION 2: Employee-Supervisor Relationship

[Supervisor Caregiving]

The following questions ask you for your views about your working relationship with your current (or most recent) supervisor. Please answer all questions.

1. The statements below reflect different ways that people describe aspects of their relationships with their supervisors. Indicate how closely each statement fits your own experiences with your supervisor by ticking the one most relevant response.

| | Strongly Disagree | Disagree | Slightly Disagree | Mixed Neutral / | Slightly Agree | Agree | Strongly Agree |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| My supervisor shows an interest in my well-being | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor accepts me no matter what I say or do | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor finds it hard to understand me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor and I work together to identify solutions to my problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Whenever possible, my supervisor provides support without delay | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I know my supervisor's door is always open if I need to discuss a problem | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If anything can be done to help me resolve a work problem, my supervisor will take the most suitable course of action | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I can never be sure how my supervisor will react when I go to him/her with a problem | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor notices when I am feeling down or stressed | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor is critical of me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor accurately perceives my needs and concerns | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor empowers me to take responsibility for my problems, rather than be dependent on him / her | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor responds promptly when I request help or advice | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Continued...

| | <i>Strongly Disagree</i> | <i>Disagree</i> | <i>Slightly Disagree</i> | <i>Neutral / Mixed</i> | <i>Slightly Agree</i> | <i>Agree</i> | <i>Strongly Agree</i> |
|---|------------------------------|--------------------------|------------------------------|----------------------------|---------------------------|--------------------------|---------------------------|
| My supervisor is always happy to sit and listen if ever I have any worries | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor does not address my needs and concerns appropriately | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor's behaviour towards me is consistently sensitive | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor keeps up to date with my needs and concerns | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor is warm and friendly with me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor is good at seeing things from my perspective | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In response to my concerns about work, my supervisor follows his / her own plans, ignoring my views of how to proceed | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor promptly acknowledges my concerns, even if s/he is unable to help me straight away | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If I have a problem, my supervisor is there for me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor deals with my concerns in a suitable manner | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor remembers personal information about me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor acts swiftly on her/his word | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor often seems irritable or impatient with me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor understands my feelings | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor is not available when I need him/her most | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor does not respond to my requests for support as quickly as I would like | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My supervisor tries to impose his/her opinions on me when we discuss solutions to my problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. For each of the following questions, please circle the response that best represents your experiences with your current (or most recent) supervisor. [LMX]

Do you know where you stand with your leader...do you usually know how satisfied your leader is with what you do?

| | | | | |
|---------------|---------------------|------------------|---------------------|-------------------|
| <i>Rarely</i> | <i>Occasionally</i> | <i>Sometimes</i> | <i>Fairly often</i> | <i>Very often</i> |
| 1 | 2 | 3 | 4 | 5 |

How well does your leader understand your job problems and needs?

| | | | | |
|------------------|-----------------|----------------------|--------------------|---------------------|
| <i>Not a bit</i> | <i>A little</i> | <i>A fair amount</i> | <i>Quite a bit</i> | <i>A great deal</i> |
| 1 | 2 | 3 | 4 | 5 |

How well does your leader recognise your potential?

| | | | | |
|-------------------|-----------------|-------------------|---------------|--------------|
| <i>Not at all</i> | <i>A little</i> | <i>Moderately</i> | <i>Mostly</i> | <i>Fully</i> |
| 1 | 2 | 3 | 4 | 5 |

Regardless of how much formal authority he/ she has built into his / her position, what are the chances that your leader would use his / her power to help you solve problems in your work?

| | | | | |
|-------------|--------------|-----------------|-------------|------------------|
| <i>None</i> | <i>Small</i> | <i>Moderate</i> | <i>High</i> | <i>Very high</i> |
| 1 | 2 | 3 | 4 | 5 |

Again, regardless of the amount of formal authority your leader has, what are the chances that he/she would 'bail you out' at his / her expense?

| | | | | |
|-------------|--------------|-----------------|-------------|------------------|
| <i>None</i> | <i>Small</i> | <i>Moderate</i> | <i>High</i> | <i>Very high</i> |
| 1 | 2 | 3 | 4 | 5 |

I have enough confidence in my leader that I would defend and justify his / her decision if he/she were not present to do so

| | | | | |
|--------------------------|-----------------|----------------|--------------|-----------------------|
| <i>Strongly disagree</i> | <i>Disagree</i> | <i>Neutral</i> | <i>Agree</i> | <i>Strongly agree</i> |
| 1 | 2 | 3 | 4 | 5 |

How would you characterize your working relationship with your leader?

| | | | | |
|------------------------------|---------------------------|----------------|----------------------------|----------------------------|
| <i>Extremely ineffective</i> | <i>Worse than average</i> | <i>Average</i> | <i>Better than average</i> | <i>Extremely effective</i> |
| 1 | 2 | 3 | 4 | 5 |

SECTION 3: General Relationships

[Global Attachment]

The following statements concern how you tend to feel in relationships with other people in general. Think broadly about your important relationships with people both in and outside of work.

| We are interested in how you <u>generally</u> experience these relationships not just in what is happening in your life currently. Please respond to every item, indicating how much you agree or disagree by <u>ticking</u> the appropriate box. | | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Strongly Disagree | Disagree | Slightly Disagree | Neutral / Mixed | Slightly Agree | Agree | Strongly Agree |
| I prefer not to show others how I feel deep down | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I worry about being abandoned by other people | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am very comfortable being close to other people | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I worry a lot about my relationships with others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Just when people start to get close to me I find myself pulling away | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I worry that other people won't care about me as much as I care about them | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I get uncomfortable when others wants to be very close | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I worry a fair amount about losing people | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I don't feel comfortable opening up to other people | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I often wish that other people's feelings for me were as strong as my feelings for them | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I want to get close to others, but I keep pulling back | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I often want to merge completely with other people, and this sometimes scares them away | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I am nervous when people get too close to me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I worry about being alone | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Continued...

| | <i>Strongly Agree</i> | <i>Agree</i> | <i>Slightly Agree</i> | <i>Neutral / Mixed</i> | <i>Slightly Disagree</i> | <i>Disagree</i> | <i>Strongly Disagree</i> |
|---|---------------------------|--------------------------|---------------------------|----------------------------|------------------------------|--------------------------|------------------------------|
| I feel comfortable sharing my private thoughts and feelings with other people | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| My desire to be very close sometimes scares people away | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I try to avoid getting too close to people | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I need a lot of reassurance that I am loved in relationships | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I find it relatively easy to get close to other people | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sometimes I feel I force people to show more feeling, more commitment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I find it difficult to allow myself to depend on others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I do not often worry about being abandoned by other people | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I prefer not to be too close to others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If I can't get people to show interest in me, I get upset or angry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I find that other people don't want to get as close as I would like | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I usually discuss my problems and concerns with others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| When I'm not involved in a relationship, I feel somewhat anxious and insecure | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Continued...

| | <i>Strongly Disagree</i> | <i>Disagree</i> | <i>Slightly Disagree</i> | <i>Neutral / Mixed</i> | <i>Slightly Agree</i> | <i>Agree</i> | <i>Strongly Agree</i> |
|---|------------------------------|--------------------------|------------------------------|----------------------------|---------------------------|--------------------------|---------------------------|
| I feel comfortable depending on others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I get frustrated when other people are not around as much as I would like | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I don't mind asking other people for comfort, advice, or help | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I get frustrated if others are not available when I need them | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| It helps to turn to others in times of need | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| When other people disapprove of me, I feel really bad about myself | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I turn to others for many things, including comfort and reassurance | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SECTION 4: Emotions and Employee-Supervisor Relationships

[Emotion Frequency]

Working relationships between employees and supervisors can be a source of both positive and negative emotions. The following questions ask about the emotions you have experienced in your relationship with your supervisor.

| | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Please rate the extent to which you have experienced each of the following emotions in your relationship with your supervisor. Tick the response that best fits your experiences. | | | | | |
| | <i>Never</i> | <i>Rarely</i> | <i>Occasionally</i> | <i>Quite Often</i> | <i>Very Frequently</i> |
| Happiness | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Anger / irritation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pride | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sadness | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gratitude | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Guilt / shame | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Embarrassment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Anxiety / fear | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Contempt | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please check you have completed all questions before
returning your questionnaire to the researcher.

Thank you for your assistance.

Appendix 4: Study 2 - Survey Cover Letter

6 April 2001

Dear Placement Student

We hope that all is going well now that you are in the last stages of your placement. Just a reminder about the essay deadline on Friday 4 May at 12.00 noon. Please make sure you send two copies of your essay, bound and preferably by registered post or recorded delivery. If you are bringing your essay into the office, we will be open from 9am-12.00. Remember to keep a copy of your essay for your reference.

I have enclosed a questionnaire that we would like you to complete and return in the prepaid envelope by Tuesday 17 April. This is a pilot study on students' relationships with their work supervisors. It has been initiated by Professor Mike West, Convenor of the Organisation Studies Group, and it is totally anonymous and confidential. We feel working relationships are a crucial factor in the success of a placement and the results will help us to update our briefing pack for employers. We hope it will particularly help us with the guidance we give new companies and supervisors, and will also be useful when briefing future placement students. Many thanks in advance for your help with this research.

You may have already heard the news that the proposed merger with Birmingham University has been cancelled; more details are on the website. If anyone has a story for the website about interesting projects they have been involved in whilst on placement, please e-mail them in with any photos as soon as possible.

Yours sincerely

Karen Jones
Placements Manager

Enc

Appendix 5: Study 2 - Questionnaire



A Survey of Placement Student-Supervisor Working Relationships

What is this survey?

This is a survey of all Aston Business School students currently out on placement. The survey is about placement students' experiences of their working relationships with their workplace supervisors. We are especially interested in your views about the interpersonal side of *your* working relationship with your supervisor or boss. The questionnaire will take only **5-10** minutes to complete. A pre-paid envelope is included for the return of your completed questionnaire.

Please complete the questionnaire with reference to your **current** supervisor or boss. We want to know your personal views on the issues raised in the questionnaire. Try to visualise your supervisor before you begin the questionnaire. Please read each question carefully, but give your immediate response.

What is covered in this survey?

The questionnaire is divided into two sections.

Section 1: Asks for background details about you and the job you do. It is particularly important for us to have this information to help us analyse the questionnaire.

Section 2: Asks for your views about your working relationship with your supervisor.

Who will see my answers?

The information you give is totally **anonymous**. We do not ask for your name or other identification. Only the data analyst will see your completed questionnaire. The information will be collated in such a way that it will not be possible to identify individual responses. Neither you nor your supervisor can be identified from the information you provide.

How should I respond?

For the majority of questions, you are asked to circle **one** response that best fits your views.

For example: if you think your supervisor has a slight knowledge of your work preferences:

| | <i>Strongly Disagree</i> | <i>Disagree</i> | <i>Slightly Disagree</i> | <i>Neutral / Mixed</i> | <i>Slightly Agree</i> | <i>Agree</i> | <i>Strongly Agree</i> |
|---|------------------------------|-----------------|------------------------------|----------------------------|---------------------------|--------------|---------------------------|
| My supervisor knows my likes and dislikes | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Do not spend too long on any question. Answer immediately, according to your **first reaction**.

Please read each question carefully and answer every question.

Thank you.

SECTION 1: Background Details

It is important that we know some of your background details. This will enable us to compare the experiences of different groups of placement students.

4. About you

| | | |
|----------------------------------|--|---|
| Age: _____ (yrs) | Are you: (Tick) Male _____ Female _____ | Nationality (your country of birth): _____ |
| Ethnic Background: (Tick) | Bangladeshi _____ Black-African _____ Black-Caribbean _____ Black- other _____ Chinese _____ | Indian _____ Pakistani _____ White _____ Other _____ |

5. About your job

| | |
|--|-------------------------|
| a) Job title: | _____ |
| b) Job role (what are your key responsibilities): | _____ _____ _____ |
| c) Length of time in this job: | _____ (months) |

6. About your Supervisor: This should be your current supervisor.

| | |
|---|---|
| Is your supervisor: (Tick) Male _____ Female _____ | For how long has this person been your supervisor? _____ (months) |
|---|---|

SECTION 2: Placement Student-Supervisor Working Relationship*[Supervisor Caregiving]**The questions in this section ask you about your working relationship with your current supervisor. Please answer all questions.***1. SUPERVISOR ACTIONS:**

These statements reflect different ways that people describe aspects of their supervisors' behaviour towards them. Indicate the extent to which each statement fits your own experiences with your supervisor by circling the most relevant response.

| | <i>Never</i> | <i>Rarely</i> | <i>Only Occasionally</i> | <i>Sometimes</i> | <i>Fairly Often</i> | <i>Very Often</i> | <i>Always</i> |
|--|--------------|---------------|--------------------------|------------------|---------------------|-------------------|---------------|
| My supervisor shows an interest in my well-being | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor accepts me no matter what I say or do | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor deals with my concerns in a suitable manner | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor seems irritable or impatient with me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor and I work together to identify solutions to my problems | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor notices when I am feeling down or stressed | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Whenever possible, my supervisor provides support without delay | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor accurately perceives my needs and concerns | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor is happy to sit and listen if ever I have any worries | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor tries to impose his/her opinions on me when we discuss solutions to my problems | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor's behaviour towards me is sensitive | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor keeps up to date with my needs and concerns | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor is warm and friendly with me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor promptly acknowledges my concerns, even if s/he is unable to help me straight away | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor is good at seeing things from my perspective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| If I have a problem, my supervisor is there for me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor remembers personal information about me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor acts swiftly on her/his word | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Continued...

| | <i>Never</i> | <i>Rarely</i> | <i>Only Occasionally</i> | <i>Sometimes</i> | <i>Fairly Often</i> | <i>Very Often</i> | <i>Always</i> |
|--|--------------|---------------|--------------------------|------------------|---------------------|-------------------|---------------|
| In response to my concerns about work, my supervisor follows his/her own agenda, ignoring my views of how to proceed | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My supervisor understands my feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

2. SUPERVISION STYLE:

[Supervisor Caregiving Style]

Below are descriptions of supervisory styles. Please indicate how "like" or "unlike" your supervisor each description is by circling the relevant responses.

| | <i>Totally Unlike my Supervisor</i> | <i>Somewhat Unlike my Supervisor</i> | <i>Slightly Unlike my Supervisor</i> | <i>Neutral / Mixed</i> | <i>Slightly Like my Supervisor</i> | <i>Somewhat Like my Supervisor</i> | <i>Totally Like my Supervisor</i> |
|---|-------------------------------------|--------------------------------------|--------------------------------------|------------------------|------------------------------------|------------------------------------|-----------------------------------|
| S/he is generally warm and responsive; s/he is good at knowing when to be supportive and when to let me operate on my own; our relationship is almost always comfortable, and I have no major reservations or complaints about it | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| S/he is fairly cold and distant, or rejecting – not very responsive; I am not his/her highest priority, his/her concerns are often elsewhere; it is possible that s/he would just as soon not have had me as a placement supervisee | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| S/he is noticeably inconsistent in her/his reactions to me, sometimes warm and sometimes not; s/he has her/his own agendas which sometimes get in the way of her/his receptiveness and responsiveness to my needs; s/he is definitely concerned about me but doesn't always show it in the best way | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

3. OVERALL RELATIONSHIP QUALITY:

For each of the following questions, please circle the response that best represents your working relationship with your supervisor.

a) Do you know where you stand with your supervisor...do you usually know how satisfied your supervisor is with what you do?

| | | | | |
|---------------|---------------------|------------------|---------------------|-------------------|
| <i>Rarely</i> | <i>Occasionally</i> | <i>Sometimes</i> | <i>Fairly often</i> | <i>Very often</i> |
| 1 | 2 | 3 | 4 | 5 |

b) How well does your supervisor understand your job problems and needs?

| | | | | |
|------------------|-----------------|----------------------|--------------------|---------------------|
| <i>Not a bit</i> | <i>A little</i> | <i>A fair amount</i> | <i>Quite a bit</i> | <i>A great deal</i> |
| 1 | 2 | 3 | 4 | 5 |

c) How well does your supervisor recognise your potential?

| | | | | |
|-------------------|-----------------|-------------------|---------------|--------------|
| <i>Not at all</i> | <i>A little</i> | <i>Moderately</i> | <i>Mostly</i> | <i>Fully</i> |
| 1 | 2 | 3 | 4 | 5 |

d) Regardless of how much formal authority he/she has built into his/her position, what are the chances that your supervisor would use his/her power to help you solve problems in your work?

| | | | | |
|-------------|--------------|-----------------|-------------|------------------|
| <i>None</i> | <i>Small</i> | <i>Moderate</i> | <i>High</i> | <i>Very high</i> |
| 1 | 2 | 3 | 4 | 5 |

e) Again, regardless of the amount of formal authority your supervisor has, what are the chances that he/she would 'bail you out' at his/her expense?

| | | | | |
|-------------|--------------|-----------------|-------------|------------------|
| <i>None</i> | <i>Small</i> | <i>Moderate</i> | <i>High</i> | <i>Very high</i> |
| 1 | 2 | 3 | 4 | 5 |

f) I have enough confidence in my supervisor that I would defend and justify his/her decision if he/she were not present to do so

| | | | | |
|--------------------------|-----------------|----------------|--------------|-----------------------|
| <i>Strongly disagree</i> | <i>Disagree</i> | <i>Neutral</i> | <i>Agree</i> | <i>Strongly agree</i> |
| 1 | 2 | 3 | 4 | 5 |

g) How would you characterize your working relationship with your supervisor?

| | | | | |
|------------------------------|---------------------------|----------------|----------------------------|----------------------------|
| <i>Extremely ineffective</i> | <i>Worse than average</i> | <i>Average</i> | <i>Better than average</i> | <i>Extremely effective</i> |
| 1 | 2 | 3 | 4 | 5 |

4. YOUR FEELINGS:

[Supervisor-specific Attachment]

These statements refer to how you typically feel about working with your current supervisor. Please respond to every item. Circle the responses below to indicate how much you agree or disagree with each statement.

| | <i>Strongly Disagree</i> | <i>Disagree</i> | <i>Slightly Disagree</i> | <i>Neutral / Mixed</i> | <i>Slightly Agree</i> | <i>Agree</i> | <i>Strongly Agree</i> |
|--|------------------------------|-----------------|------------------------------|----------------------------|---------------------------|--------------|---------------------------|
| I prefer not to show my supervisor how I feel deep down | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I wish there were a way I could spend more time with my supervisor | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I try to avoid having to go to my supervisor for help or advice | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I'd like to know more about my supervisor as a person | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Talking over problems with my supervisor makes me feel ashamed or foolish | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I sometimes wonder whether I'm my supervisor's favourite employee | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I find it difficult to allow myself to depend on my supervisor | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I wish I could do something for my supervisor too | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I don't mind asking my supervisor for support | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I wish my supervisor and I could be friends | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I prefer to handle problems on my own rather than ask my supervisor for help | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

5. ADDITIONAL COMMENTS:

Please use the space below to write any further comments you may have about your working relationship with your supervisor.

Please check you have completed all questions before returning your questionnaire in the envelope provided. Thank you for your assistance.

Appendix 6: Studies 1 and 2 – Supplementary Factor Analyses

Factor solution for Frequency of Emotions measure used in Study 1

| | Factor | |
|---------------|--------|-----|
| | 1 | 2 |
| ANGER | .47 | |
| SADNESS | .62 | |
| ANXIETY/FEAR | .74 | |
| GUILT/SHAME | .62 | |
| EMBARRASSMENT | .70 | |
| CONTEMPT | .48 | |
| HAPPINESS | | .65 |
| PRIDE | | .75 |
| GRATITUDE | | .69 |

Note: Principal axis factoring; loadings above .3

Factor solution for Global Attachment measure (GLOBATT) used in Study 1

| | Factor | |
|------------|--------|-----|
| | 1 | 2 |
| GLOBATT.1 | | .59 |
| GLOBATT.2 | .63 | |
| GLOBATT.3 | | .70 |
| GLOBATT.4 | .48 | |
| GLOBATT.5 | | .63 |
| GLOBATT.6 | .68 | |
| GLOBATT.7 | | .64 |
| GLOBATT.8 | .64 | |
| GLOBATT.9 | | .72 |
| GLOBATT.10 | .74 | |
| GLOBATT.11 | | .67 |
| GLOBATT.12 | .60 | |
| GLOBATT.13 | | .58 |
| GLOBATT.14 | .62 | |
| GLOBATT.15 | | .60 |
| GLOBATT.16 | .56 | |
| GLOBATT.17 | | .60 |
| GLOBATT.18 | .70 | |
| GLOBATT.19 | | .51 |
| GLOBATT.20 | .48 | |
| GLOBATT.21 | | |
| GLOBATT.22 | .43 | |
| GLOBATT.23 | | .56 |
| GLOBATT.24 | .62 | |
| GLOBATT.25 | .59 | |
| GLOBATT.26 | | .65 |
| GLOBATT.27 | .62 | |
| GLOBATT.28 | | .41 |
| GLOBATT.29 | .58 | |
| GLOBATT.30 | | .54 |
| GLOBATT.31 | .58 | |
| GLOBATT.32 | | .49 |
| GLOBATT.33 | .49 | |
| GLOBATT.34 | | .50 |

Note: Principal axis factoring; loadings above .3;

Factor 1 = Global Anxiety, Factor 2 = Global Avoidance;

Item 21 loaded below .3 on avoidance but was retained in the scale because it did not adversely affect scale reliability.

Factor solution for Specific Attachment measure (SUPATT) used in Study 2

| | Factor | |
|-----------|---------------|----------|
| | 1 | 2 |
| SUPATT.1 | .60 | |
| SUPATT.3 | .71 | |
| SUPATT.5 | .69 | |
| SUPATT.7 | .72 | |
| SUPATT.9 | .58 | |
| SUPATT.11 | .48 | |
| SUPATT.2 | | .46 |
| SUPATT.4 | | .64 |
| SUPATT.6 | | .44 |
| SUPATT.8 | | .61 |
| SUPATT.10 | | .50 |

Note: Principal axis factoring; loadings above .4

Factor 1 = Specific Avoidance; Factor 2 = Specific Anxiety

Preliminary Research Proposal

Working Relationships

**The impact of employee-supervisor relationship quality on
employee well-being and turnover intentions**

Annilee Game

March 2001



Research Objectives

Effective working relationships are an essential component of organisational success. Of central importance are relationships between employees and their immediate supervisors. Understanding how to maximise the quality of these working relationships may be a key factor in reducing employee stress and turnover.

The aims of the proposed research are to explore:

- In what ways the quality of employee-supervisor relationships differs between individuals;
- The implications of employee-supervisor relationship quality for employee stress levels, job satisfaction, and turnover intentions.

Research Process

Data Collection

The research will be conducted in two phases:

Phase 1: A brief questionnaire survey, distributed to a random sample of nurses.

Phase 2: In-depth analysis with a selection of individuals who participated in phase 1. Interviews will be used to gain a deeper understanding of the nature and consequences of employee-supervisor relationship quality.

Organisation Contribution

- Access to employee database to enable random sampling

Research Costs

- The researcher will meet all research costs

Timescale

| Month (2001) | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Data Collection | | | | | | | | | |
| Phase 1: Survey | | | | | | | | | |
| Phase 2: Interviews | | | | | | | | | |
| Feedback | | | | | | | | | |
| Feedback to Phase 1 participants | | | | | | | | | |
| Feedback to Phase 2 participants | | | | | | | | | |
| Report to organisation | | | | | | | | | |

Benefits to the Organisation

The research will have benefits for individuals, teams, and the organisation.

Individual

Improving the quality of employee-supervisor relationships will help improve the working environment for individuals working under already stressful conditions. Employees will feel better able to cope with stress and more satisfied with their jobs.

Team

The research will enable training interventions to help supervisors maximise the quality of their working relationships with their employees. This will have a positive impact on both the well-being and performance of supervisors' work groups as a whole.

Organisation

Enhancing the quality of working relationships will have a positive impact on job satisfaction and the reduction of stress levels. In turn, absenteeism and turnover should be reduced. The retention of nursing staff will benefit organisational effectiveness and reduce the costs of recruitment.

Feedback

Organisation Feedback

The organisation will receive a report on the main research findings. Practical recommendations will be made for enhancing employee-supervisor relationship quality.

Employee Feedback

Phase 1 participants will receive feedback on request.

Phase 2 participants will receive a brief summary of the interview findings.

Confidentiality

At every stage of the research process the confidentiality of information provided by participants will be guaranteed. All findings will be presented in aggregate form in order to prevent identification of individuals' responses.

The Researcher

Annilee Game (supervised by Professor Michael West)
Doctoral Student, Organisation Studies, Aston Business School, 1999 – present



Aston University

Content has been removed for copyright reasons

Research Interests:

- Working relationships
- Stress and well-being
- The impact of personality on job-related outcomes

Contact Details:

- Telephone: xxxxxx
- Mobile: xxxxxxx
- E-mail: xxxxxxx

Appendix 8: Study 3 - Survey Cover Letter

26 November 2001

Dear «Surname»

Re: A Survey of Working Relationships in the NHS

As part of an ongoing commitment across the NHS to seek staff views and offer support and development to improve working lives, _____ NHS Trust is participating in a research project that is being carried out by the Organisation Studies Group at Aston Business School.

The work is complementary to the RCN Clinical Leadership programmes and the LEO Programme, and other management and leadership development initiatives in the Trust with which many of you will be familiar. It will help the Trust to continue to develop initiatives for staff in key areas such as yours.

The project is supported by Senior Managers in the Trust and in order that they can make good use of the valuable information gained from the research a summary report will be shared totally anonymously with the Chief Nurse. I would emphasise that no individual or ward/department will be identifiable in that summary report.

A more detailed explanation about the questionnaire and its completion is given on the front cover of the questionnaire booklet, and I hope you will feel able to complete the enclosed copy.

Please note that, for the purposes of this research, the term 'Supervisor' refers to your *ward/department manager*. This will usually be the lead G grade for your ward/department, but in a small number of cases your ward/department manager may be a different grade - an acting G, or an H grade, for example.

A reply-paid envelope is included for you to return your questionnaire direct to Aston Business School. The last date for returning the questionnaire is **17 December 2001**. If you have any queries about the questionnaire or the research please do not hesitate to contact me on the number below.

Thank you.

Yours faithfully

Annilee Game, Project Manager
Aston Business School
Tel: xxxxxxxx

Appendix 9: Study 3 - Questionnaire



Working Relationships in the NHS

What is this survey?

This is a survey being carried out by independent researchers from Aston Business School, Birmingham. It is the first part of a research programme that is designed to identify the impacts of employee-supervisor working relationship quality for 'front-line' staff in the NHS. The results of this survey are intended to lead to recommendations that will help to create a more effective and supportive working environment.

What is covered in this survey?

The questionnaire is divided into three sections. The questions are broad rather than designed for your specific work group or unit. This is so that the study can be conducted across the organisation to enable reliable comparisons of everyone's views.

Section 1: Asks for background details about you and the job you do. It is particularly important for us to have this information to help us analyse the questionnaire.

Section 2: Asks for your views about your working relationship with your supervisor.

Section 3: The final section asks about your feelings towards your job and your well-being.

Who will see my answers?

The information you give is completely **confidential**. The data will be collected, held and analysed by the researchers at Aston Business School (ABS). No-one other than the researchers at ABS will see your answers. Your organisation will not have access to the completed questionnaires. The ID number on this questionnaire is solely for use by the researchers in planning the follow-up stage of the research. The information provided in the survey will be aggregated and summarised in a report that will be sent to the organisation. It will not be possible to identify individuals or their supervisors in this report, thereby protecting your anonymity and confidentiality.

How long will it take?

The questionnaire should take **20-30** minutes to complete.

How should I respond?

For the majority of questions, you are asked to circle or tick **one** response that best fits your views. For example: if you think your supervisor has a slight knowledge of your work preferences:

| | <i>Strongly Disagree</i> | <i>Disagree</i> | <i>Slightly Disagree</i> | <i>Neutral / Mixed</i> | <i>Slightly Agree</i> | <i>Agree</i> | <i>Strongly Agree</i> |
|---|------------------------------|-----------------|------------------------------|----------------------------|---------------------------|--------------|---------------------------|
| My supervisor knows my likes and dislikes | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Do not spend too long on any question. Answer immediately, according to your **first reaction**.

PLEASE READ EACH QUESTION CAREFULLY AND ANSWER EVERY QUESTION.
THANK YOU.

SECTION 1: Background Details

It is important that we know some of your background details. This will enable us to compare the experiences of different groups in your organisation.

1.1 About you

| | | |
|---------------------------|---|---|
| Age: _____ (yrs) | Are you: (tick) Male _____ Female _____ | Nationality (your country of birth): _____ |
| Ethnic Background: (tick) | | |
| Bangladeshi _____ | Black- other _____ | Pakistani _____ |
| Black-African _____ | Chinese _____ | White _____ |
| Black-Caribbean _____ | Indian _____ | Other (please specify) _____ |

1.2 About your job

| | |
|--|---|
| a) What is your job title? _____ | b) What is your grade? _____ |
| c) How long have you been in your current position? _____ (years and/or months) | d) How long have you worked for this Trust? _____ (years and/or months) |
| e) Have you returned to nursing after taking a break from the profession? (circle) YES NO | f) If you have returned to nursing, for how long was your break from the profession? _____ (years and/or months) |

| |
|--|
| d) Do you work: (tick) FULL-TIME _____ PART-TIME _____ |
| e) How many hours do you work per week? _____ |
| f) If you do not have a permanent contract, how long is your contract for? _____ |

1.3 About your Supervisor:

This should be your current supervisor (i.e. your G Grade Ward Manager or equivalent).

| | |
|--|--|
| Is your supervisor: (tick) Male _____ Female _____ | For how long has this person been your supervisor? (years and/or months) _____ |
|--|--|

SECTION 2: You and Your Supervisor (G Grade)

[Supervisor: Caregiving]

The questions in this section ask about your working relationship with your current supervisor. Please answer all questions.

2.1 These statements reflect different ways that people describe aspects of their supervisor's behaviour towards them.

Indicate the extent to which each statement fits your own experiences with your current supervisor by circling the most relevant response.

| | Never | Rarely | Occasionally | Only Occasionally | Sometimes | Fairly Often | Very Often | Always |
|---|-------|--------|--------------|-------------------|-----------|--------------|------------|--------|
| a. My supervisor shows an interest in my well-being | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| b. My supervisor accepts me no matter what I say or do | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| c. My supervisor deals with my concerns in a suitable manner | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| d. My supervisor seems irritable or impatient with me | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| e. My supervisor and I work together to identify solutions to my problems | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| f. My supervisor notices when I am feeling down or stressed | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| g. Whenever possible, my supervisor provides support without delay | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| h. My supervisor accurately perceives my needs and concerns | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| i. My supervisor is happy to sit and listen if ever I have any worries | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| j. My supervisor tries to impose his/her opinions on me when we discuss solutions to my problems | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| k. My supervisor's behaviour towards me is sensitive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| l. My supervisor keeps up to date with my needs and concerns | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| m. My supervisor is warm and friendly with me | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| n. My supervisor promptly acknowledges my concerns, even if s/he is unable to help me straight away | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| o. My supervisor is good at seeing things from my perspective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| p. If I have a problem, my supervisor is there for me | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| q. My supervisor remembers personal information about me | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| r. My supervisor acts swiftly on her/his word | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| s. In response to my concerns about work, my supervisor follows his/her own agenda, ignoring my views of how to proceed | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| t. My supervisor understands my feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

2.2 Your Feelings:

[Relationship Events Battery]

Working relationships between employees and supervisors can be a source of both good and bad feelings. The following questions ask about what you would think and feel if your supervisor behaved towards you in the ways described here.

Imagine your supervisor performing each of the behaviours below. Indicate how you think would react if the event happened to you today.

EVENT A

You need to speak to your supervisor about an urgent work matter. The problem cannot be resolved without first consulting your supervisor. You approach your supervisor, and say that you really need his/her opinion on a problem that's cropped up. Your supervisor says s/he cannot see you right now.

1. If my supervisor did this to me, I would feel: (circle)

| | Not at all | Very slightly | A little | Moderately | Quite a bit | Extremely |
|----------------------|------------|---------------|----------|------------|-------------|-----------|
| a. Pleased | 1 | 2 | 3 | 4 | 5 | 6 |
| b. Hurt | 1 | 2 | 3 | 4 | 5 | 6 |
| c. Guilty | 1 | 2 | 3 | 4 | 5 | 6 |
| d. Annoyed | 1 | 2 | 3 | 4 | 5 | 6 |
| e. Happy | 1 | 2 | 3 | 4 | 5 | 6 |
| f. Embarrassed | 1 | 2 | 3 | 4 | 5 | 6 |
| g. Grateful | 1 | 2 | 3 | 4 | 5 | 6 |
| h. Anxious / worried | 1 | 2 | 3 | 4 | 5 | 6 |
| i. Ashamed | 1 | 2 | 3 | 4 | 5 | 6 |
| j. Glad | 1 | 2 | 3 | 4 | 5 | 6 |
| k. Frustrated | 1 | 2 | 3 | 4 | 5 | 6 |
| l. Proud | 1 | 2 | 3 | 4 | 5 | 6 |
| m. Angry | 1 | 2 | 3 | 4 | 5 | 6 |
| n. Upset | 1 | 2 | 3 | 4 | 5 | 6 |

2. If my supervisor behaved this way, it would be because: (circle)

| | Disagree Strongly | Disagree | Disagree Somewhat | Agree Somewhat | Agree | Agree Strongly |
|---|-------------------|----------|-------------------|----------------|-------|----------------|
| a. My supervisor's behaviour was due to something about him/her (e.g. the type of person s/he is, the mood s/he was in) | 1 | 2 | 3 | 4 | 5 | 6 |
| b. The reason my supervisor behaved this way is <i>not</i> likely to change | 1 | 2 | 3 | 4 | 5 | 6 |
| c. The reason my supervisor behaved this way is something that affects other areas of our working relationship | 1 | 2 | 3 | 4 | 5 | 6 |
| d. My supervisor did this on purpose, rather than unintentionally | 1 | 2 | 3 | 4 | 5 | 6 |
| e. My supervisor's behaviour was motivated by selfish rather than <i>unselfish</i> concerns | 1 | 2 | 3 | 4 | 5 | 6 |
| f. My supervisor deserves to be blamed for this situation | 1 | 2 | 3 | 4 | 5 | 6 |

EVENT B

At one of your regular meetings with your supervisor, the two of you discuss your performance. During the past year, your work unit has often been short-staffed, leaving you (and your colleagues) with a very heavy workload. You tell your supervisor about the severe strain you have been experiencing, and the concerns you have about the effectiveness of the work unit under these difficult conditions. Your supervisor shrugs his/her shoulders and remarks that all departments are facing the same problem.

| | Not at all | Very slightly | A little | Moderately | Quite a bit | Extremely |
|--|------------|---------------|----------|------------|-------------|-----------|
| 1. If my supervisor did this to me, I would feel: (circle) | | | | | | |
| a. Pleased | 1 | 2 | 3 | 4 | 5 | 6 |
| b. Hurt | 1 | 2 | 3 | 4 | 5 | 6 |
| c. Guilty | 1 | 2 | 3 | 4 | 5 | 6 |
| d. Annoyed | 1 | 2 | 3 | 4 | 5 | 6 |
| e. Happy | 1 | 2 | 3 | 4 | 5 | 6 |
| f. Embarrassed | 1 | 2 | 3 | 4 | 5 | 6 |
| g. Grateful | 1 | 2 | 3 | 4 | 5 | 6 |
| h. Anxious / worried | 1 | 2 | 3 | 4 | 5 | 6 |
| i. Ashamed | 1 | 2 | 3 | 4 | 5 | 6 |
| j. Glad | 1 | 2 | 3 | 4 | 5 | 6 |
| k. Frustrated | 1 | 2 | 3 | 4 | 5 | 6 |
| l. Proud | 1 | 2 | 3 | 4 | 5 | 6 |
| m. Angry | 1 | 2 | 3 | 4 | 5 | 6 |
| n. Upset | 1 | 2 | 3 | 4 | 5 | 6 |

| | Disagree Strongly | Disagree | Disagree Somewhat | Agree Somewhat | Agree | Agree Strongly |
|---|-------------------|----------|-------------------|----------------|-------|----------------|
| 2. If my supervisor behaved this way, it would be because: (circle) | | | | | | |
| a. My supervisor's behaviour was due to something about him/her (e.g. the type of person s/he is, the mood s/he was in) | 1 | 2 | 3 | 4 | 5 | 6 |
| b. The reason my supervisor behaved this way is <i>not</i> likely to change | 1 | 2 | 3 | 4 | 5 | 6 |
| c. The reason my supervisor behaved this way is something that affects other areas of our working relationship | 1 | 2 | 3 | 4 | 5 | 6 |
| d. My supervisor did this on purpose, rather than unintentionally | 1 | 2 | 3 | 4 | 5 | 6 |
| e. My supervisor's behaviour was motivated by selfish rather than <i>unselfish</i> concerns | 1 | 2 | 3 | 4 | 5 | 6 |
| f. My supervisor deserves to be blamed for this situation | 1 | 2 | 3 | 4 | 5 | 6 |

2.3 These statements refer to how you actually tend to feel about working with your current supervisor. Please respond to every item.

Circle the responses below to indicate how much you agree or disagree with each statement.

| | [Supervisor-Specific Attachment] | | | | | | |
|---|----------------------------------|----------|----------------------|-------------------|-------------------|-------|-------------------|
| | Strongly Disagree | Disagree | Slightly Disagree | Neutral/ Mixed | Slightly Agree | Agree | Strongly Agree |
| a. I prefer not to show my supervisor how I feel deep down | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. I wish there were a way I could spend more time with my supervisor | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| c. I try to avoid having to go to my supervisor for help or advice | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| d. I'd like to know more about my supervisor as a person | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| e. Talking over problems with my supervisor makes me feel ashamed or foolish | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| f. I sometimes wonder whether I'm my supervisor's favourite employee | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| g. I find it difficult to allow myself to depend on my supervisor | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| h. I wish I could do something for my supervisor too | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| i. I don't mind asking my supervisor for support | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| j. I wish my supervisor and I could be friends | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| k. I prefer to handle problems on my own rather than ask my supervisor for help | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Continued over page...

SECTION 3: Work and Well-being

The questions in this section ask you about your general well-being and feelings towards your job. Please answer all questions.

It is possible that completing some questions may draw your attention to problems you are experiencing. We would advise you to contact your GP if you are worried that your problems may be serious.

3.1 These questions ask you how you have been feeling over the past month.

Please circle the responses that best apply to you.

BOX 1

| | | |
|--------------------------------------|----|-----|
| a. Have you felt keyed-up, on edge? | NO | YES |
| b. Have you been worrying a lot? | NO | YES |
| c. Have you been irritable? | NO | YES |
| d. Have you had difficulty relaxing? | NO | YES |

IF YOU ANSWERED 'YES' TO **TWO OR MORE** OF THE ABOVE
PLEASE ANSWER THE QUESTIONS IN BOX 2.
IF NOT, GO STRAIGHT TO BOX 3.

BOX 2

| | | |
|--|----|-----|
| e. Have you been sleeping poorly? | NO | YES |
| f. Have you had headaches or neck aches? | NO | YES |
| g. Have you had any of the following: trembling, tingling, dizzy spells, sweating, frequent stomach upset? | NO | YES |
| h. Have you been worried about your health? | NO | YES |
| i. Have you had difficulty falling asleep? | NO | YES |

NOW GO TO BOX 3

BOX 3

| | | |
|--|----|-----|
| j. Have you had low energy? | NO | YES |
| k. Have you had a loss of interests? | NO | YES |
| l. Have you lost confidence in yourself? | NO | YES |
| m. Have you felt hopeless? | NO | YES |

IF YOU ANSWERED 'YES' TO **ANY** OF THE ABOVE PLEASE
ANSWER THE QUESTIONS IN BOX 4.

IF YOU ANSWERED **NO** TO **ALL** QUESTIONS PLEASE GO STRAIGHT TO THE NEXT PAGE.

BOX 4

| | | |
|---|----|-----|
| n. Have you had difficulty concentrating? | NO | YES |
| o. Have you lost weight (due to poor appetite)? | NO | YES |
| p. Have you been waking early? | NO | YES |
| q. Have you felt slowed up? | NO | YES |
| r. Have you tended to feel worse in the mornings? | NO | YES |

3.2 The following statements concern how you tend to feel in relationships that are important to you.

[Global Attachment]

Please respond to every item, indicating how much you agree or disagree by circling the appropriate response.

| [Global Attachment] | Strongly Disagree | Disagree | Neutral/ Mixed | Agree | Strongly Agree |
|--|----------------------|----------|-------------------|-------|-------------------|
| <i>Please respond to every item, indicating how much you agree or disagree by circling the appropriate response.</i> | | | | | |
| a. I prefer not to show others how I feel deep down | 1 | 2 | 3 | 4 | 5 |
| b. I worry about being abandoned by other people | 1 | 2 | 3 | 4 | 5 |
| c. I am very comfortable being close to other people | 1 | 2 | 3 | 4 | 5 |
| d. I worry a lot about my relationships with others | 1 | 2 | 3 | 4 | 5 |
| e. Just when people start to get close to me I find myself pulling away | 1 | 2 | 3 | 4 | 5 |
| f. I worry that other people won't care about me as much as I care about them | 1 | 2 | 3 | 4 | 5 |
| g. I get uncomfortable when others want to be very close | 1 | 2 | 3 | 4 | 5 |
| h. I worry a fair amount about losing people | 1 | 2 | 3 | 4 | 5 |
| i. I don't feel comfortable opening up to other people | 1 | 2 | 3 | 4 | 5 |
| j. I often wish that other people's feelings for me were as strong as my feelings for them | 1 | 2 | 3 | 4 | 5 |
| k. I want to get close to others, but I keep pulling back | 1 | 2 | 3 | 4 | 5 |
| l. I often want to merge completely with other people, and this sometimes scares them away | 1 | 2 | 3 | 4 | 5 |
| m. I am nervous when people get too close to me | 1 | 2 | 3 | 4 | 5 |
| n. I worry about being alone | 1 | 2 | 3 | 4 | 5 |
| o. I feel comfortable sharing my private thoughts and feelings with other people | 1 | 2 | 3 | 4 | 5 |
| p. My desire to be very close sometimes scares people away | 1 | 2 | 3 | 4 | 5 |
| q. I try to avoid getting too close to people | 1 | 2 | 3 | 4 | 5 |
| r. I need a lot of reassurance that I am loved in relationships | 1 | 2 | 3 | 4 | 5 |
| s. I find it relatively easy to get close to other people | 1 | 2 | 3 | 4 | 5 |
| t. Sometimes I feel I force people to show more feeling, more commitment | 1 | 2 | 3 | 4 | 5 |
| u. I find it difficult to allow myself to depend on others | 1 | 2 | 3 | 4 | 5 |
| v. I do not often worry about being abandoned by other people | 1 | 2 | 3 | 4 | 5 |
| w. I prefer not to be too close to others | 1 | 2 | 3 | 4 | 5 |
| x. If I can't get people to show interest in me, I get upset or angry | 1 | 2 | 3 | 4 | 5 |
| y. I find that other people don't want to get as close as I would like | 1 | 2 | 3 | 4 | 5 |
| z. I usually discuss my problems and concerns with others | 1 | 2 | 3 | 4 | 5 |
| aa. When I'm not involved in a relationship, I feel somewhat anxious and insecure | 1 | 2 | 3 | 4 | 5 |
| bb. I feel comfortable depending on others | 1 | 2 | 3 | 4 | 5 |
| cc. I get frustrated when other people are not around as much as I would like | 1 | 2 | 3 | 4 | 5 |
| dd. I don't mind asking other people for comfort, advice, or help | 1 | 2 | 3 | 4 | 5 |
| ee. I get frustrated if others are not available when I need them | 1 | 2 | 3 | 4 | 5 |
| ff. It helps to turn to others in times of need | 1 | 2 | 3 | 4 | 5 |
| gg. When other people disapprove of me, I feel really bad about myself | 1 | 2 | 3 | 4 | 5 |
| hh. I turn to others for many things, including comfort and reassurance | 1 | 2 | 3 | 4 | 5 |

3.3 The questions on this page ask for your opinions about different aspects of your job

Please circle the one number for each question that comes closest to reflecting your opinion about it

| Disagree very much | Disagree moderately | Disagree slightly | Agree slightly | Agree moderately | Agree very much |
|-----------------------|------------------------|----------------------|-------------------|---------------------|--------------------|
|-----------------------|------------------------|----------------------|-------------------|---------------------|--------------------|

| | | | | | | |
|---|---|---|---|---|---|---|
| a. I feel I am being paid a fair amount for the work I do | 1 | 2 | 3 | 4 | 5 | 6 |
| b. There is really too little chance for promotion on my job | 1 | 2 | 3 | 4 | 5 | 6 |
| c. My supervisor is quite competent in doing his/her job | 1 | 2 | 3 | 4 | 5 | 6 |
| d. I am not satisfied with the benefits I receive | 1 | 2 | 3 | 4 | 5 | 6 |
| e. When I do a good job, I receive the recognition for it that I should receive | 1 | 2 | 3 | 4 | 5 | 6 |
| f. Many of our rules and procedures make doing a good job difficult | 1 | 2 | 3 | 4 | 5 | 6 |
| g. I like the people I work with | 1 | 2 | 3 | 4 | 5 | 6 |
| h. I sometimes feel my job is meaningless | 1 | 2 | 3 | 4 | 5 | 6 |
| i. Communications seem good within this organisation | 1 | 2 | 3 | 4 | 5 | 6 |
| j. Pay rises are too few and far between | 1 | 2 | 3 | 4 | 5 | 6 |
| k. Those who do well on the job stand a fair chance of being promoted | 1 | 2 | 3 | 4 | 5 | 6 |
| l. My supervisor is unfair to me | 1 | 2 | 3 | 4 | 5 | 6 |
| m. The benefits we receive are as good as most other organisations offer | 1 | 2 | 3 | 4 | 5 | 6 |
| n. I do not feel that the work I do is appreciated | 1 | 2 | 3 | 4 | 5 | 6 |
| o. My efforts to do a good job are seldom blocked by red tape | 1 | 2 | 3 | 4 | 5 | 6 |
| p. I find I have to work harder at my job because of the incompetence of people I work with | 1 | 2 | 3 | 4 | 5 | 6 |
| q. I like doing the things I do at work | 1 | 2 | 3 | 4 | 5 | 6 |
| r. The goals of this organisation are not clear to me | 1 | 2 | 3 | 4 | 5 | 6 |
| s. I feel unappreciated by the organisation when I think about what they pay me | 1 | 2 | 3 | 4 | 5 | 6 |
| t. People get ahead as fast here as they do in other places | 1 | 2 | 3 | 4 | 5 | 6 |
| u. My supervisor shows too little interest in the feelings of subordinates | 1 | 2 | 3 | 4 | 5 | 6 |
| v. The benefit package we have is equitable | 1 | 2 | 3 | 4 | 5 | 6 |
| w. There are too few rewards for those who work here | 1 | 2 | 3 | 4 | 5 | 6 |
| x. I have too much to do at work | 1 | 2 | 3 | 4 | 5 | 6 |
| y. I like my co-workers | 1 | 2 | 3 | 4 | 5 | 6 |
| z. I often feel that I do not know what is going on with the organisation | 1 | 2 | 3 | 4 | 5 | 6 |
| aa. I feel a sense of pride in doing my job | 1 | 2 | 3 | 4 | 5 | 6 |
| bb. I feel satisfied with my chances for salary increases | 1 | 2 | 3 | 4 | 5 | 6 |
| cc. There are benefits we do not have which we should have | 1 | 2 | 3 | 4 | 5 | 6 |
| dd. I like my supervisor | 1 | 2 | 3 | 4 | 5 | 6 |
| ee. I have too much paperwork | 1 | 2 | 3 | 4 | 5 | 6 |
| ff. I don't feel my efforts are rewarded the way they should be | 1 | 2 | 3 | 4 | 5 | 6 |
| gg. I am satisfied with my chances for promotion | 1 | 2 | 3 | 4 | 5 | 6 |
| hh. There is too much bickering and fighting at work | 1 | 2 | 3 | 4 | 5 | 6 |
| ii. My job is enjoyable | 1 | 2 | 3 | 4 | 5 | 6 |
| jj. Work assignments are not fully explained | 1 | 2 | 3 | 4 | 5 | 6 |

3.4 Please circle the response that best represents your feelings for each of the following questions.

a. How likely is it that you will actively look for a new job in the next year?

| <i>Not at all likely</i> | <i>Unlikely</i> | <i>Quite unlikely</i> | <i>Not sure / mixed</i> | <i>Quite likely</i> | <i>Likely</i> | <i>Extremely likely</i> |
|--------------------------|-----------------|-----------------------|-------------------------|---------------------|---------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | <i>Strongly disagree</i> | <i>Disagree</i> | <i>Slightly disagree</i> | <i>Neither agree nor disagree</i> | <i>Slightly agree</i> | <i>Agree</i> | <i>Strongly agree</i> |
|--|--------------------------|-----------------|--------------------------|-----------------------------------|-----------------------|--------------|-----------------------|
| b. I often think about quitting | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| c. I will probably look for a new job in the next year | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| d. As soon as I can find another job, I'll leave the Trust | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

COMMENTS: Please use this space if you have any further comments about your job in general, or your working relationship with your supervisor.

Please check you have completed all questions
and then return your questionnaire in the pre-paid envelope ASAP within the next 3 weeks.

MANY THANKS FOR COMPLETING THE SURVEY.

Appendix 10: Study 3 – Survey Reminder Letter

December 2001

Dear Colleague

RE: A Survey of Working Relationships

I recently sent you a survey regarding your views about your job and your working relationship with your supervisor. I would like to thank you if you have already completed and returned your questionnaire. Your contribution is greatly appreciated.

If you are still in the process of completing your questionnaire, I look forward to receiving it by **17th December**.

The survey is completely confidential. This is an independent piece of research, but as indicated previously, the *anonymous* results will be made available to ____ Trust. They will use the work in the development of initiatives to improve the quality of working lives. So please take the time complete the survey.

If you did not receive a questionnaire, and would like to contribute, please do not hesitate to contact me on the number below.

Yours faithfully

Annilee Game, Project Manager
Aston Business School
Tel: xxxxxxxx

Appendix 11: Study 3 – Supplementary Preliminary Analyses

Factor solution for the Relationship Event Interpretation (INTERP) measure

| | <i>Factor 1</i> |
|----------|-----------------|
| INTERP.1 | .76 |
| INTERP.2 | .86 |
| INTERP.3 | .82 |
| INTERP.4 | .83 |
| INTERP.5 | .87 |
| INTERP.6 | .77 |

Note: Principal axis factoring

Factor solution for the Negative Emotional Reactions measure

| | <i>Factor</i> | |
|-----------------|---------------|-----|
| | 1 | 2 |
| ANNOYED | .94 | |
| ANGRY | .92 | |
| FRUSTRATED | .84 | |
| UPSET | .77 | |
| HURT | .64 | |
| EMBARRASSED | | .80 |
| ASHAMED | | .65 |
| GUILTY | | .62 |
| ANXIOUS/WORRIED | | .42 |

Note: Principal axis factoring; loadings above .3

Correlation of background variables and dependent variables (plus supervisor caregiving) in Study 3

| | AGE | SITE | SUPTEN | JOBTEN | ORG TEN | FT/PT | WARDSIZE | MAILGRP |
|----------|-------|------|--------|--------|---------|-------|----------|---------|
| SC | -.18* | -.07 | -.13 | -.13 | -.11 | -.05 | -.09 | -.07 |
| SP.AV | .18* | .14 | .07 | .10 | .03 | .02 | .01 | -.07 |
| SP.AX | -.16* | -.14 | -.00 | -.10 | -.03 | -.08 | .05 | -.04 |
| GLOB.AV | .27** | .08 | -.06 | .23** | .15* | .03 | .02 | .07 |
| GLOB.AX | .04 | .04 | .08 | -.01 | .04 | -.07 | .02 | -.06 |
| INTERP | .15* | .07 | .09 | .02 | -.02 | -.06 | .04 | -.09 |
| EMOTION | -.16* | .02 | -.07 | -.03 | -.10 | -.09 | -.03 | -.08 |
| ANGER | -.14 | -.01 | -.08 | -.03 | -.10 | -.09 | -.00 | -.12 |
| DISTRESS | -.14 | .07 | -.02 | -.02 | -.05 | -.05 | -.08 | .05 |

Note: SC = Supervisor Caregiving; SP.AV = Specific Avoidance; SP.AX = Specific Anxiety;
GLOB.AV = Global Avoidance; GLOB.AX = Global Anxiety; * $p < .05$ ** $p < .01$

One-way ANOVAs of Grade by all dependent variables (plus supervisor caregiving) in Study 3

| | <i>F</i> |
|----------|----------|
| SC | 2.10 |
| SP.AV | 1.31 |
| SP.AX | 2.37 |
| GLOB.AV | 1.33 |
| GLOB.AX | 2.14 |
| INTERP | 0.39 |
| EMOTION | 2.65 |
| ANGER | 1.18 |
| DISTRESS | 5.81** |

Note: SC = Supervisor Caregiving; SP.AV = Specific Avoidance; SP.AX = Specific Anxiety;
GLOB.AV = Global Avoidance; GLOB.AX = Global Anxiety; ** $p < .01$

Independent Samples t-tests:

Ethnic Group by all dependent variables (plus supervisor caregiving) in Study 3

| | t |
|----------|------|
| SC | .28 |
| SP.AV | .78 |
| SP.AX | 1.93 |
| GLOB.AV | -.97 |
| GLOB.AX | .08 |
| INTERP | -.55 |
| EMOTION | 1.20 |
| ANGER | 1.24 |
| DISTRESS | .67 |

Note: Results of all t-tests non-significant at .05 significance level;

SC = Supervisor Caregiving; SP.AV = Specific Avoidance; SP.AX = Specific Anxiety;

GLOB.AV = Global Avoidance; GLOB.AX = Global Anxiety;

Factor analysis of Supervisor Caregiving (SC) with Specific Avoidance (SUPATT)

| | Factor | | |
|-----------|--------|-----|-----|
| | 1 | 2 | 3 |
| SC.1 | .83 | | |
| SC.2 | .63 | | |
| SC.3 | .76 | | |
| SC.4 (R) | | | .59 |
| SC.5 | .77 | | |
| SC.6 | .85 | | |
| SC.7 | .90 | | |
| SC.8 | .87 | | |
| SC.9 | .78 | | |
| SC.10 (R) | | | .33 |
| SC.11 | .82 | | |
| SC.12 | .93 | | |
| SC.13 | .74 | | |
| SC.14 | .83 | | |
| SC.15 | .86 | | |
| SC.16 | .86 | | |
| SC.17 | .76 | | |
| SC.18 | .88 | | |
| SC.19 (R) | .65 | | |
| SC.20 | .86 | | |
| SUPATT.1 | | .54 | |
| SUPATT.3 | | .71 | |
| SUPATT.5 | | .64 | |
| SUPATT.7 | -.39 | .54 | |
| SUPATT.9 | | .57 | |
| SUPATT.11 | | .72 | |

Note: Principal axis factoring; loadings above .3;

Despite slight overlap of one item the two scales clearly loaded on separate factors. Therefore both scales were retained unaltered for use in Study 3.

Factor analysis of Supervisor Caregiving (SC) with Event Interpretation (INTERP)

| | Factor | | |
|-----------|--------|-----|-----|
| | 1 | 2 | 3 |
| SC.1 | .88 | | |
| SC.2 | .46 | | |
| SC.3 | .76 | | |
| SC.4 (R) | | | .62 |
| SC.5 | .85 | | |
| SC.6 | .93 | | |
| SC.7 | .93 | | |
| SC.8 | .86 | | |
| SC.9 | .85 | | |
| SC.10 (R) | | .51 | .32 |
| SC.11 | .64 | | |
| SC.12 | .84 | | |
| SC.13 | .75 | | |
| SC.14 | .73 | | |
| SC.15 | .73 | | |
| SC.16 | .91 | | |
| SC.17 | .80 | | |
| SC.18 | .81 | | |
| SC.19 (R) | .46 | | |
| SC.20 | .85 | | |
| INTERP.1 | | .63 | |
| INTERP.2 | | .58 | |
| INTERP.3 | | .59 | |
| INTERP.4 | | .89 | |
| INTERP.5 | | .87 | |
| INTERP.6 | | .77 | |

Note: Principal axis factoring; loadings above .3

Despite slight overlap of one item the two scales clearly loaded on separate factors.
Therefore both scales were retained unaltered for use in Study 3.

Appendix 12: Study 4 – Interview Invitation Letter

February 2002

Dear

Re: Working Relationships Phase II

Thank you for finding the time to complete the survey of working relationships that I sent you recently. The aim of the survey was to gain a broad-based picture of everyone's views about their jobs and working relationships. The information you have provided will make a valuable contribution to the research.

Of course, real-life experiences aren't easily summed-up by ticks-in-boxes alone. So the second (and final) phase of the research involves speaking directly to nurses. This is so that people can talk about their actual experiences of work, and their working relationships with their ward managers or supervisors.

I am writing to you now, as well as to other randomly selected nurses, to invite you to take part in this next phase. I will be visiting ____ Trust during the afternoons (1-5pm) of the following dates:

| | |
|----------------|--|
| Site 1 [venue] | 25 February - 1 March 12 - 15 March |
|----------------|--|

| | |
|----------------|---------------------------------------|
| Site 2 [venue] | 4 March; 6 - 8 March 18 - 22 March |
|----------------|---------------------------------------|

I would like to speak to people individually for one hour. It will be an informal meeting, and all views will be treated with complete confidentiality. As with the survey, only *anonymous* results will be shared with ____ Trust. It will not be possible to identify anyone from information they provide.

If you are able to take part, and will be available on one of the dates listed above, please complete and return the enclosed reply slip as soon as possible using the pre-paid envelope. Upon receipt of your reply I will contact you by your preferred method to arrange date, time, and venue that is most convenient for you.

I look forward to hearing from you soon. Please do not hesitate to contact me if you would like more information about any aspect of the research.

Thank you.

Yours sincerely

Annilee Game
Project Manager, Organisation Studies etc.

Reply Slip

1 NAME: _____

2 I am able / unable* to take part in Working Relationships Phase II.

(*delete as applicable)

3 Contacting you

To make it easier to reach you, and to help maintain confidentiality, you may prefer not to be contacted on your work phone number. Please indicate how you would like to be contacted to arrange the meeting.

Tick preferred option:

Additional information:

Mobile phone

number: _____

Text message

number: _____

E-mail

address: _____

Pager

number: _____

Work phone

number: _____

3a If you've indicated mobile or work phone, when is usually the best time to call you?

Please return this slip in the reply-paid envelope.
You will be contacted by your chosen method to arrange a convenient date, time, and location for the meeting. Thank you for your help.

Appendix 13: Study 4 – Interview Introduction Notes

Timescale

- We should finish within an hour, I'll keep an eye on the time – is that going to be ok for you?

About me

- Researcher at Aston University. Work in a department that does a lot of research in the NHS looking at issues relating to employee well-being and effectiveness. Also writing PhD – this work is an important part of that.
- I approached ____ Trust and asked if they'd be interested in my research – it fitted with the chief exec's goals e.g. greater openness, listening to & supporting staff. Also fits MD leader stuff - RCN/LEO.

About the research

- Interested how working relationships with managers / bosses affect the way people feel at work – both day-to-day and longer term.
- Aim is to develop recommendations for improving these relationships, so trying to gather as many different experiences as possible.

Confidentiality

- Want to emphasise that whatever you say here is absolutely and totally confidential.
- No-one except me will have access to the information. *No-one at ____ knows who I'm talking to.* Won't be possible to identify anyone (you or supervisor or ward) from the way the data will be written up.

Findings

- Data will be pooled together to look for common patterns and trends.
- Report due in June – to DON and staff side reps. Short summary of main issues raised by survey and talking to people. Will feed into mgt devt work developing leadership skills, i.e. broad / across board v targeting particular wards/indivs.

About the questions

- Not meant to be a formal interview or interrogation – more like a conversation. But I do have some set things I'd like to ask everybody.
- No 'right' or 'wrong' answers. Everyone has different experiences, you are the expert – I'm trying to collect as many as possible.
- Start with some quick easy ones to get us warmed up. Main focus is on your working relationship with your ward manager – I'd like to try and get an understanding of what the relationship is like and what it means to you.
- Stop me if you don't understand anything. N.B. I may need to ask you some stupid questions since I'm not familiar with some of the terms etc. that are second nature to nurses.

Ward manager id

- NB. I don't know who your ward manager is. Going to be talking a lot about your ward manager. How would you prefer to refer to her/him? E.g. first name only, false name, Mrs. X?

Taping

- It's very difficult for me to listen, talk and write notes at the same time, so I'd like to tape our conversation if that's ok with you?
- Tape will only be labelled with a number (only I know what it stands for). Keep locked away.
- *Any questions? Are you happy to begin?*

Appendix 14: Study 4 - Interview Guide

A. Background

Q1 How long have you been a nurse?

Q2 How long have you worked here?

Q3 What does your current job involve?

Explore:

- grade, role, type of ward, main duties, shift-work/nights, team-working?

Q4 How long has X been your ward manager?

Q5 How much contact do you have with your ward manager, on average?

[prompt: frequency of any interaction - several times daily, daily, a few times per week, weekly, less than once per week; if it varies, what is the *range*?]

Explore:

- How much contact is initiated by your ward manager? How much by you?
- What sorts of things do you usually see / talk to your ward manager about?

[prompt: task-related, help/advice, informal/personal]

- Do you have any formal meetings?

If yes: How often? What is the purpose of the meetings?

If no: Why not?

[prompt: ward practice/structure; line mgt from mentor or F grade, lack of own or manager's time/availability; prefer not to]

B. Relationship

Q6 How would you describe your ward manager?

[*prompt*: What is s/he like? What kind of person is s/he? – personality, behaviour e.g. in/competent, good/bad boss, fair, resourceful, un/approachable, un/friendly, un/supportive, understanding, in/considerate, unpredictable etc.]

Explore:

- Can you give me any examples?
- *If relevant and/or respondent seems stuck*: How does this ward manager compare to your previous ward manager? [*prompt*: better, worse, similar – in what ways?]
- Can you remember your first impressions? How have they changed?

Q7 What's your working relationship with your ward manager like?

Explore:

- What's it like working with her/him? (can you give an example?)
- How well do you 'get on'? (can you give an example?)
- Are there any especially good things about the relationship?
- Are there any not-so-good things? [*prompt*: anything you would change?]

Q8 How does s/he react if you go to her/him for help/advice/support?

Explore:

- How does s/he treat you? (Can you give me a recent example?)

Q9 Do you see any connections between the quality of your relationship with your ward manager, as you've described it, and how you feel while you're at work?

[*prompt*: think about how you feel day-to-day when your ward manager is around – positive/negative impact on: mood/stress levels/well-being, performance, motivation, job satisfaction]

Explore:

- **If no:** No impact at all? Why is that?
- **If yes:** How does it affect you? [example(s), if possible]

C. Incidents

Focusing now on one-to-one interactions between you and your ward manager:

Q10 Can you think of an occasion when your ward manager said or did something to you that made you experience negative emotions?

Can you describe the incident for me in as much detail as you can remember?

Prompts:

- Explain that it needn't be anything major e.g. a fight, it might be anything at all, perhaps something seemingly trivial that nevertheless stands out in their mind because of how it made them feel. May seem funny now/doesn't matter.
- Relationship with ward manager may be extremely good, supportive etc. in general but can they think of any exceptions?

N.B. Give plenty of time to gather thoughts. If difficulty recalling, take them back through last shift, last month, etc.;

- Give brief example from own experience;
- If still can't recall suggest move on and come back to it;
- If insist nothing negative has ever happened, follow same protocol but for a *positive* incident that sums up the quality of the relationship for them.

If positive incident add: *what if... (cite opposite/negative scenario to that which was just described) ... how might that have made you feel?*

For all incidents explore:

- What happened, when, where, anyone else present? What did you think?

- What do you think caused the incident? (Why do you think it happened? E.g. s/th about w/m, you, situation)
- How exactly did you feel at the time? [elicit specific *emotion(s)* and *intensity*]
- Were there any knock-on (longer term) effects of the incident:
 - a) in general,
 - b) for your working relationship?
- How do you feel about these events now? Any other incidents? [*repeat procedure*]

Finishing off...

Q11 Where do you see the relationship going in the future?

[*prompt*: what will it be like in 6months/ 1 year from now? No change, better, worse – in what ways?]

Explore:

- How do you feel about that?

Q12 *We've talked a lot about your ward manager – to try and place that in context:*

What other aspects of your job have a negative impact on how you feel at work?

Explore:

- *For any examples given*: how does that make you feel exactly? [elicit emotions]

Finally...

Is there anything we've discussed that you'd like to go back to?

Is there anything else you've thought of that you'd like to mention?