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The attached book chapter is one of the most comprehensive scientific articles on the nature and determinants of police stress. Using a large sample of serving Australian police officers, the authors examined how the levels of occupational well-being among police officers compared with other occupational groups, and then examined whether police officers' levels of occupational well-being were determined by their personality characteristics, their use of coping strategies, the climate of their organisation, or their operational and organisational work experiences. Results showed that:

- *On average, police officers experience lower levels of well-being than other occupational groups;*
- *This could not be attributed to the nature of police work (i.e., operational policing duties);*
- *Organisational work experiences (i.e., related to generic organisational characteristics) exerted a stronger influence on police well-being than operational work experiences (e.g., specific policing duties);*
- *Organisational climate (e.g., appraisal and recognition, role clarity, goal congruency, supportive leadership, decision-making, professional growth and professional interaction) was the strongest overall influence on levels of police wellbeing;*
- *Police withdrawal behaviour (i.e., stress-related absenteeism and compensation claims) was influenced more by the absence of morale (e.g., energy and enthusiasm), rather than the presence of any stress (e.g., frustration and anxiety); and,*
- *Personal coping strategies exerted no influence on police well-being outcomes.*

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CHAPTER FOUR

Conventional Wisdom is Often Misleading: Police Stress Within an Organisational Health Framework

Peter M. Hart and Peter Cotton

4.1 INTRODUCTION

Occupational stress among police officers is often viewed as an unfortunate, but inevitable part of police work. Although this view dominates much of the discussion about police stress in scientific, management, and other professional forums, there is no compelling evidence to support the view that police officers are any more or less stressed than other occupational groups (e.g. Hart, Wearing, and Headey, 1995; Kirkcaldy *et al.*, 1995).

To address this apparent discrepancy, we drew on the organisational health framework (Hart and Cooper, 2001) to investigate three questions that are central to the debate on the nature and extent of police stress. First, we examined whether the levels of occupational well-being among police officers differed from the levels that are found in other occupational groups. Second, we examined whether police officers' levels of occupational well-being were determined by the work experiences that are peculiar to the nature of police work, or the experiences that are common to most occupational groups. Finally, we examined whether it was the personality characteristics of police officers, the nature of the police organisation, police officers' use of different coping strategies, or their positive and negative work experiences that contributed most to police officers' levels of occupational well-being. By providing answers to these questions, we are able to establish interventions and strategies that are most likely to improve occupational well-being in police organisations.

4.2 OCCUPATIONAL STRESS AMONG POLICE OFFICERS

It goes without saying that police perform an extremely important role in society, particularly through their law enforcement and community service functions. Moreover, the nature of the police role has given rise to a strong stereotypic view

about the dangerous and stressful nature of police work. As with most stereotypes, however, it is important to take a careful and systematic look at whether the stereotype actually accords with reality. This was recently noted by Lilienfield (2002), who pointed out that a scientific approach still remains the optimal approach for separating cherished erroneous beliefs from valid knowledge.

Challenging stereotypes and the 'conventional wisdom' through appropriate scientific methods is particularly important in the area of police stress. For many years, researchers and practitioners have tended to assume that police work is inherently stressful (e.g. Anshel *et al.*, 1997; Cacioppe and Mock, 1985; Dantzer, 1987; Sigler and Wilson, 1988). A growing number of researchers have begun to question this assumption, however, arguing that there is little empirical evidence to support the notion that police work is especially stressful (e.g. Anson and Bloom, 1988; Brown and Campbell, 1990; Hart *et al.*, 1994, 1995; Lawrence, 1984; Malloy and Mays, 1984; Terry, 1981).

A number of studies have found that police officers typically regard the organisational aspects of their work (e.g. leader and management practices, appraisal and recognition processes, career opportunities, clarity of roles, coworker relations, goal alignment) to be more stressful than the operational nature of police work. It has been found, for example, that operational experiences, such as being exposed to danger, dealing with victims, and the use of force in the execution of their duties, are not overly stressful for most police officers (Brown and Campbell, 1990; Hart *et al.*, 1994, 1995; Kop and Euwema, 2001).

Instead of the nature of police work itself being stressful, these studies have found that police stress has more to do with the organisational context in which police officers' work. In other words, it seems to be organisational and managerial practices that contribute to police stress, rather than the nature of the job itself. This means that police work may in fact be no different to other jobs, at least in terms of the factors that contribute to levels of occupational stress (e.g. Griffin *et al.*, 2000; Sauter and Murphy, 1995).

The notion that police work is no different to other jobs has also received support from the quality of life and subjective well-being literatures. In a recent longitudinal study, for example, Hart (1999) found that job satisfaction among police officers accounted for between 3% and 13% of the variance in their overall levels of life satisfaction. This was much smaller than the contribution made by the non-work domains of police officers' lives. More importantly, these findings were similar to those that have been found in studies of other occupational (e.g. Adams *et al.*, 1996; Biggam *et al.*, 1997) and community groups (e.g. Heady *et al.*, 1985; Near *et al.*, 1983). Accordingly, these findings suggest that the role of work is no more important for police officers than it is for other occupational groups, and like most employees, police officers' overall levels of psychological well-being are determined more by what happens outside of work, rather than what happens whilst they are at work.

Given that two different lines of enquiry strongly suggest that police officers are very similar to other occupational groups, in terms of the issues that affect their levels of occupational well-being and overall life satisfaction, it is important for researchers and practitioners to question why there is such a strong

belief that police work is inherently stressful. One explanation is that the conventional view about the nature and extent of police stress is professionally self-serving. For example, Terry (1981) has argued that police officers are able to set themselves apart from other occupational groups and legitimize the professionalism and value of their occupation by perpetuating the notion that police work is very stressful. This is consistent with arguments that police unions have sometimes put forward during industrial relations and enterprise bargaining negotiations.

It is also easy to see from an outsider's perspective why there is a degree of face validity in the notion that police work is much more stressful than other occupations. Members of the general community are frequently exposed to stereotypic images that show the dangerous aspects of police work. For example, police are often portrayed in risky roles in movies and fictional literature, and these portrayals are reinforced by the stories that are most newsworthy in the print media. When confronted with these images, a person who would not like to find themselves in this type of work situation could easily conclude that it would be quite stressful if they were required to perform these types of work duties. However, this attribution of 'stressfulness' does not necessarily reflect the nature of police work. It merely reflects the fact that many people would find it stressful if they were actually to become police officers themselves.

It should be remembered that police officers choose to become police officers knowing the types of duties and situations they are likely to be involved with and can choose to change jobs if they ultimately find that police work is not to their liking. From an anecdotal standpoint, we have spoken with many police officers that actually enjoy their jobs, suggesting that the perceived 'inherent stressfulness' of police work may have more to do with the views of outsiders, rather than police officers themselves. It seems reasonable to assume that if people are in a job of their choosing they may find it to be quite enjoyable, despite the fact that others may find the job to be quite stressful. The Arnold Schwarzenegger movie entitled 'Kindergarten Cop' highlights this view, albeit from the alternative perspective. In the movie, Arnold plays the role of a tough cop who is not fazed by the dangerous and unsavoury aspects of his work, but finds that it is quite stressful to be placed in the position of teaching a class of young children. The point we are making is that police officers and teachers may not find the nature of their jobs to be particularly stressful, but this may change quite dramatically if they were asked to take on each others' job roles.

There have also been a number of conceptual and methodological problems in the police stress literature that has helped perpetuate the view that police work is inherently stressful. One of the main problems in the police stress literature has been the widespread use of the stressors and strain approach (e.g. Greller *et al.*, 1992). This approach presumes that adverse work experiences (stressors) cause psychological and behavioural strain. Accordingly, research adopting this approach obtains ratings on potential stressors and then correlates these ratings with various indices of strain (e.g. measures of psychological distress and somatic symptoms).

As noted by Hart and Cooper (2001) the stressors and strain approach is an overly simplistic framework that has given rise to four questionable assumptions that pervade much of the occupational stress literature. These assumptions are that: (a) stress is associated with unpleasant emotions (e.g. Klein, 1996; Newton, 1989); (b) employees' feelings of stress occur at the expense of more pleasurable emotions (Quick *et al.*, 1992); (c) stress can be measured by a single variable (e.g. Hurrell, 1998); and (d) stress is caused primarily by adverse work experiences (e.g. Sauter and Murphy, 1995).

A growing body of evidence, however, has called these assumptions into question. For example, the emphasis placed on stressors (e.g. adverse experiences) and strain (e.g. psychological distress) fails to account for the fact that employees' responses to their environment include both positive (e.g. positive affect, psychological morale) and negative (e.g. negative affect, psychological distress) dimensions (e.g. Diener and Emmons, 1985; George, 1996). It has also been found that police officers, like many other employees, are exposed to a range of positive and negative work experiences (Hart *et al.*, 1994). Moreover, these positive and negative experiences make independent contributions to police officers' levels of job satisfaction (Hart, 1999). These findings demonstrate that feelings of stress do not necessarily occur at the expense of more pleasurable emotions, and that stress is not necessarily caused by adverse work experiences. It is possible, for example, that stress is caused by the absence of positive work experiences, rather than the presence of negative work experiences.

Another concern is that many studies of occupational stress rely on the use of context-free, rather than domain-specific, measures of psychological well-being. Context-free measures, such as the General Health Questionnaire (e.g. Goldberg, 1978) assess police officers' overall levels of psychological distress, rather than the levels of distress that are related to the work domain of their lives. Given that the non-work domain of employees lives tends to be much more important than the work domain in contributing to overall psychological well-being (e.g. Adams *et al.*, 1996; Hart, 1999; Headey and Wearing, 1992), conclusions about occupational stress, based on context-free measures of psychological distress, are likely to be of limited value. This is of particular concern when context-free measures are used to compare the levels of psychological distress among different occupational groups. In these circumstances, it is not possible to determine whether any observed differences are due to the work or nonwork domains of employees' lives.

More recently, researchers have endeavoured to incorporate moderator variables, such as decision latitude and coping processes, into the stressors and-strain framework (e.g. Day and Livingstone, 2001; Sauter and Murphy, 1995). This research, however, continues to be framed by a focus on adverse work experiences and how these relate to negative psychological outcomes (e.g. psychological distress). Moreover, this relatively narrow focus fails to consider the broader organisational context or other important individual and organisational characteristics, such as personality, job skills, leadership, and motivation that are likely to influence occupational well-being (Hart and Cooper, 2001).

A major limitation of the failure to consider the broader organisational context is that the traditional stressor and strain approach tends to motivate

interventions that focus primarily on individual employees. Interventions that typically focus on individual employees include coping skills training, employee assistance programs, and stress inoculation programs (e.g. Anshel, 1997, 2000; Lowenstein, 1999). Although these types of interventions may be of some value, they focus on changing the employee, rather than changing the conditions or circumstances that may actually be the cause of occupational stress in the first place. In other words, they address the symptoms, rather than the causes of occupational stress.

Moreover, Hurrell (1995) has noted that the stressors and strain approach tends to reinforce the view that occupational stress is an employee problem, rather than an organisational problem that needs to be addressed more systemically. This concern is compounded by the failure of occupational stress researchers to link indices of occupational stress to relevant organisational performance outcomes, such as the cost of absenteeism and workers' compensation claims for stress-related injury, as well as ethical behaviour and complaints about the quality of service delivery. More importantly, the failure to link occupational stress to organisational performance has tended to marginalize the issue of occupational stress in the broader management and organisational behaviour literature (Hart and Cooper, 2001; Wright and Cropanzano, 2000). It may also explain why managers in many police organisations still view occupational stress as an occupational health and safety issue, rather than an issue that is central to the leadership and management practices of the organisation.

Given this overall state of affairs, there is a need for methodologically sound studies that take a broader theoretical and practical perspective. As such, there is a need for occupational stress studies that provide information about the relative contribution of a broader range of organisational and individual factors. For example, research has shown that personality characteristics (Cooper and Payne, 1991; Costa and McRae, 1980), coping processes (Carpenter, 1992), organisational climate (Griffin *et al.*, 2000), and positive and negative work experiences (Hart *et al.*, 1995) are all likely to contribute to indices of occupational stress. It is not known, however, which of these factors is more important in determining occupational stress among police officers.

4.3 MOVING BEYOND THE STRESSORS AND STRAIN APPROACH

We believe that these concerns about the occupational stress literature can be addressed by drawing on the organisational health framework that was recently proposed by Hart and Cooper (2001). The core elements of this framework are shown in Figure 4.1. According to the organisational health framework, it is important for researchers and practitioners to be concerned with the occupational well-being of employees *and* organisational performance. In other words, it is not sufficient to be concerned with occupational well-being in itself, but instead, occupational well-being must be linked to outcomes that affect organisational performance. In a recent empirical study, for example, it was found that satisfaction among employees led to greater discretionary effort which, in turn,

contributed to the satisfaction that was being experienced by customers of the organisation (Hart *et al.*, 2002). Although these findings demonstrate that occupational well-being may be related to 'core business' outcomes, it is important to extend this line of research to include a range of performance indicators (e.g. Wright and Cropanzano, 2000).

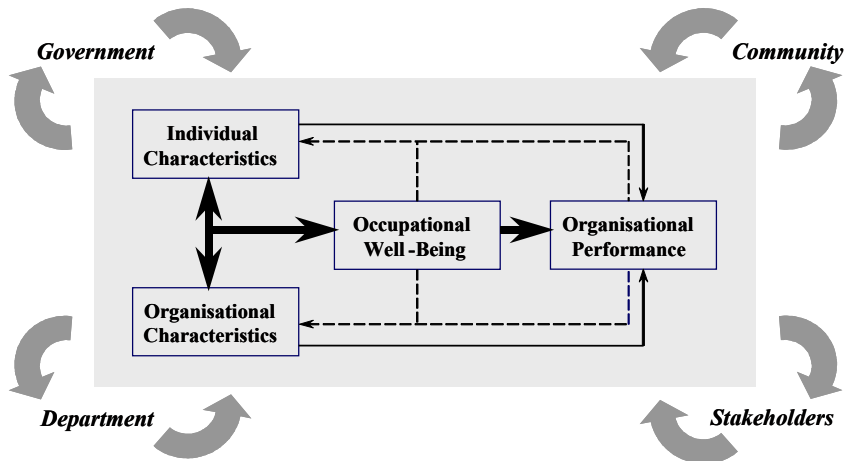


Figure 4.1 A Heuristic Model of Organisational Health

The focus on occupational well-being is also an important departure from the language of occupational stress. The term 'stress' is typically associated with psychological distress (e.g. Cooper, 1998; Newton, 1989), and forms only one part of the much broader construct of occupational well-being. Drawing on a considerable body of empirical evidence in the quality of life literature that describes the structure of subjective well-being (e.g. Diener, 2000), Hart and Cooper (2001) argue that occupational well-being includes both emotional and cognitive components. The emotional component reflects the two independent dimensions of positive and negative affect (referred to in this study as morale and distress, respectively), whereas the cognitive component reflects employees' judgments about their levels of job satisfaction (Hart, 1999). This means that when assessing occupational well-being it is important to include domain-specific measures that assess all three dimensions.

The organisational health framework also emphasizes the role that individual and organisational characteristics play in determining both occupational well-being and organisational performance. Although Hart and Cooper (2001) discuss a range of different individual and organisational characteristics, process theories of occupational stress, such as the cognitive-relational (e.g. Lazarus and Folkman, 1984) and dynamic equilibrium (e.g. Hart, 1999; Hart *et al.*, 1994; Headey and Wearing, 1989) theories, provide some guidance on the characteristics that are likely to be of most importance. In terms of individual characteristics, the enduring personality characteristics of neuroticism and extraversion (Costa and

McCrae, 1989), as well as the use of emotion-focused and problem-focused coping strategies (Latack and Havlovic, 1992), have been related to indices of psychological well-being in both occupational and community studies (e.g. Hart, 1999; Headey and Wearing, 1990; Moyle, 1995). In terms of organisational characteristics, research has shown that organisational climate (Griffin *et al.*, 2000; Michela *et al.*, 1995) and employees' positive (i.e. uplifts or emotionally motivating) and negative (i.e. hassles, pressures, stressors, or emotionally distressing) experiences of work (Hart *et al.*, 1995) strongly influence indices of occupational well-being.

The organisational health framework shown in Figure 4.1 also recognizes that the relationship between individual and organisational characteristics on the one hand, and occupational well-being and organisational performance on the other hand, operates in a broader context. The nature of this broader context varies according to the level of analysis that is applied to the core elements of the framework. For example, if the core elements of the model were applied to individual employees and their work teams, then the policies and practices of the wider organisation will form part of the context in which they must operate. If the core elements of the model were applied to the organisation as a whole, however, then other factors, such as government policies, regulatory authorities, and the wider community's expectations, will make up the broader context in which the organisation operates.

According to Hart and Cooper (2001), the organisational health framework provides a theoretical approach that can be used to guide occupational stress research in a way that is of more relevance to organisations and the broader management and work psychology literatures. They acknowledge, however, that the organisational health framework can give rise to a number of competing theoretical propositions and research models. One of the research models proposed by Hart and Cooper is shown in Figure 4.2. This model is based on an integration of the cognitive-relational (e.g. DeLongis *et al.*, 1988; Lazarus and Folkman, 1984) and dynamic equilibrium (e.g. Hart, 1999) theories of stress with the quality of life and subjective well-being literature (e.g. Headey and Wearing, 1989, 1992). Although Hart and Cooper provide a detailed discussion of the theoretical background to this research model, there are six key points that have particular relevance to the current study.

First, the research model shown in Figure 4.2 proposes that the structure of occupational well-being consists of three components that reflect the positive (e.g. energy, enthusiasm, and pride) and negative (e.g. anxiety, depression, and frustration) emotional responses that police officers may have to their work, as well as the judgments that police officers make about their overall levels of job satisfaction (George, 1996; Hart, 1999). Second, it is presumed that these indices of occupational well-being will influence police officers' propensity to seek medical advice, take sickness absence, submit a workers' compensation claim, or seek another job, as a result of stress-related problems. Given that prior research has not investigated the link between these withdrawal behaviour intentions and the three components of occupational well-being, it is not known which of the

three components of occupational well-being are likely to be most influential in determining withdrawal behaviour intentions.

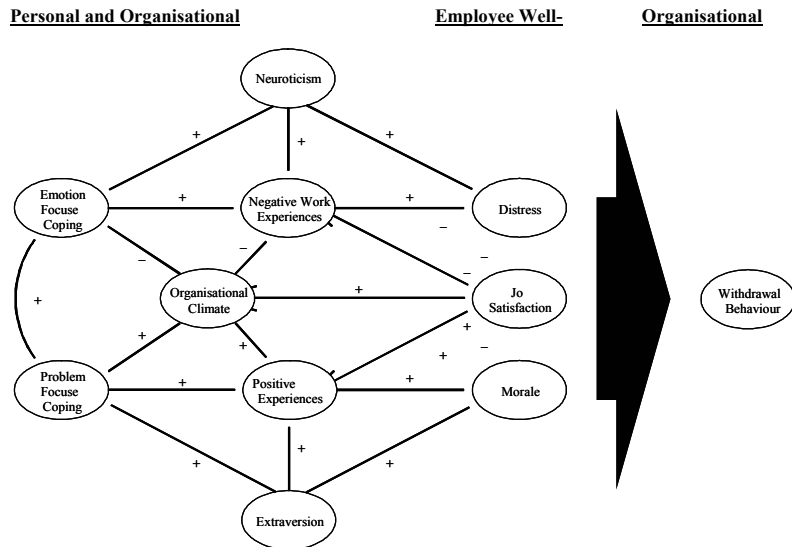


Figure 4.2 Example of an Organisational Health Research Model. ['+' indicates a positive relationship and '-' indicates a negative relationship. Dotted lines indicate possible relationships that are expected to be comparatively weak.]

Third, the research model shown in Figure 4.2 suggests that organisational climate will underpin police officers' positive and negative work experiences and that these experiences, in turn, will contribute to their levels of occupational well-being. Consistent with previous research in the quality of life (e.g. Headey and Wearing, 1989) and occupational stress (e.g. Hart, 1994, 1999) literatures, the model suggests that police officers' negative work experiences will contribute more strongly to distress than to morale, whereas their positive work experiences will contribute more strongly to morale than to distress. This gives rise to the following propositions:

- P1: Organisational climate contributes to both positive and negative work experiences.
- P2: Negative work experiences contribute more strongly than positive work experiences to distress; and,
- P3: Positive work experiences contribute more strongly than negative work experiences to morale.

Fourth, the research model suggests that police officers' use of emotion-focused coping strategies will contribute positively to their negative work experiences, whereas the use of problem-focused coping strategies will contribute positively to their positive work experiences. This pattern of relationships is

consistent with the results of previous studies (Hart *et al.*, 1995; Heady and Wearing, 1990), and reflects Lazarus' (1990) contention that measures of daily experiences reflect the reappraisals that a person makes after they have attempted to cope (i.e. secondary appraisal) with a situation that was potentially beneficial or harmful (i.e. primary appraisal) to their well-being. Moreover, this pattern of relationships runs contrary to the views expressed in much of the occupational stress literature, where it is often assumed that the use of coping strategies mediates the relationship between employees' work experiences and their levels of psychological well-being. Accordingly, this gives rise to another proposition that was investigated in this study:

- P4: Work experiences mediate the relationship between coping and occupational well-being, rather than coping mediating the relationship between work experiences and occupational well-being.

Fifth, the research model shown in Figure 4.2 suggests that the enduring personality characteristics of neuroticism (i.e. emotional reactivity) influences emotion-focused coping, negative work experiences and distress, whereas extraversion (i.e. sociability) influences problem-focused coping, negative work experiences and morale. This pattern of relationships is consistent with prior research (e.g. Hart *et al.*, 1995; Headey and Wearing, 1989; 1990), and reflects the positive and negative affectivity pathways that have often been thought to underpin variables of this nature (e.g. George, 1996). Moreover, a considerable body of empirical evidence has shown that neuroticism exerts a particularly strong influence on other negative emotionally-laden variables (Burke *et al.*, 1993; Moyle, 1995; Williams *et al.*, 1996). Although relatively little is known about the potency of extraversion, recent studies have found that it is less influential. Accordingly, we investigated the following proposition:

- P5: Neuroticism is the strongest determinant of distress, but not of morale and job satisfaction.

Finally, the research model shown in Figure 4.2 suggests that organisational climate underpins police officers' use of emotion- and problem- focused coping strategies, their positive and negative work experiences, and levels of occupational well-being. Although the influence of organisational climate has not been compared directly with the influence of personality characteristics, coping strategies, and positive and negative work experiences, the pattern of relationships shown in the model suggests that organisational climate is likely to have a strong influence on occupational well-being. This is due to the fact that organisational climate reflects the core organisational behaviours that underpin police officers' coping strategies and work experiences. Accordingly, we investigated the following proposition:

- P6: Organisational climate is more influential than coping and positive and negative work experiences in determining police officers' levels of occupational well-being.

4.4 THE PRESENT STUDY

In the present study, we used data obtained from a large sample of employees who worked for an Australian police organisation. Australian police organisations include two types of employees; sworn police officers whom perform a range of traditional policing duties, and unsworn public sector workers who perform a range of support functions (e.g. administrative services, communications, and human resources). Both types of employees were invited to participate in the present study. This meant that we were able to compare the views of police officers and other employees who worked in the same organisation. To provide additional comparative data, this study also drew on a normative database that was available for a large heterogeneous sample of public sector employees who did not work in police organisations. The use of these three data sources was a particular strength of the present study, because it enabled us to compare police officers and other employees within the police organisation, and then to compare employees in the police organisation with employees who worked in other organisations.

Another key strength of the present study was that it enabled us to extend the prior work of Hart and his colleagues (e.g. Hart *et al.*, 1994; 1995) in two important ways. First, this is the first study of police officers to include organisational climate and a range of organisational and operational work experiences. Second, we included domain-specific measures of occupational well-being in the current study. Although Hart's prior work with police officers has included measures of job satisfaction (e.g. Hart, 1999), all other outcome measures have been of a non-specific or context-free nature. Moreover, this is one of the first studies to examine the relative influence that police officers' enduring personality characteristics, use of coping strategies, perceptions of organisational climate, as well as their positive and negative work experiences, make to their levels of occupational well-being and withdrawal behaviour intentions.

4.5 METHOD

4.5.1 Participants

Questionnaire booklets were mailed to a random sample of 1,550 sworn and unsworn employees who worked for an Australian state police organisation. The sworn employees performed traditional policing duties, whereas the unsworn employees worked in a range of administrative and managerial support areas. This is an important distinction, because the unsworn employees were general public sector employees, rather than police officers.

A total of 793 employees returned completed questionnaire booklets (response rate: 51.16%). Of these, 589 (74.27%) were sworn police officers and 167 (21.06%) were unsworn support personnel. The occupational status of 37 employees was not known. However, the overall ratio of sworn and unsworn employees (77.91% and 22.09%, respectively) was similar to that in the organisation as a whole.

In terms of the sworn police officers, 184 (31.24%) were Constables, 161 (27.33%) were Senior Constables, 174 (29.54%) were Sergeants, 38 (6.45%) were Senior Sergeants, and 32 (5.43%) were Commissioned Officers. Their ages ranged from 20 years to 56 years ($M = 35.00$ years, $SD = 8.56$ years), and their lengths of service ranged from less than 1 year to 38 years ($M = 12.68$ years, $SD = 8.52$ years). Of the 589 sworn police officers, 75 (12.73%) were female.

The unsworn public sector employees represented all occupational levels, from the most junior to the most senior positions. Their ages ranged from 19 years to 63 years ($M = 36.98$ years, $SD = 9.17$ years), and their lengths of service ranged from less than 1 year to 29 years ($M = 5.99$ years, $SD = 5.81$ years). Of the 167 unsworn public sector employees, 115 (68.86%) were female.

4.5.2 Comparative Norm Data

To address some of the research questions posed in this chapter, it was necessary to draw on normative data that was available for Australian employees who did not work for a police organisation. For this purpose, we were able to draw on data that were collected during a different research project. The comparative data was obtained from a sample of 1,117 employees who worked for five different public sector organisations (Education, Family Services, Fire and Ambulance Services, Health, and Primary Industries) in the same Australian State as the police organisation that participated in this study. In terms of the employees who provided the comparative data, their ages ranged from 18 years to 65 years ($M = 38.72$ years, $SD = 10.50$ years), and their lengths of service ranged from less than 1 year to 46 years ($M = 6.22$ years, $SD = 6.97$ years). Of the 1,092 employees, 666 (60.11%) were female (note that the gender of 9 employees was not known).

4.6 MEASURES

4.6.1 Occupational Well-Being

Three separate measures of occupational well-being were used. These measures assessed both the affective and cognitive components of occupational well-being (Hart and Cooper, 2001; Headey and Wearing, 1992). The 14-item Occupational Positive and Negative Affects Scales (Hart *et al.*, 1996) were used to assess the positive (e.g. feeling energised, enthusiastic, cheerful, happy; referred to in this study as *Morale*) and negative (e.g. feeling anxious, depressed, tense, unhappy; referred to in this study as *Distress*) emotional responses that employees had to

their work (coefficient alpha = .92 and .89, respectively). Employees were asked to rate how often they had experienced 14 positive and negative emotions whilst at work over the past month, on a 7-point scale ranging from “not at all” to “all the time” (coefficient alpha = .92 and .87 for Morale and Distress, respectively).

The 6-item Quality of Work Life Scale (Hart *et al.*, 1996) was used to assess employees’ judgments about the quality of their work life. This measure was based on the Life Satisfaction Scale that has been used extensively in the quality of life literature (Pavot and Diener, 1993), by changing the focal point from “life” more generally to “life at work.” Example items include, “The conditions of my life at work are excellent,” and “I am satisfied with my life at work,” and “In most ways my work life is close to my ideal.” Employees were asked to rate their level of agreement with each statement on a 7-point scale ranging from “strongly disagree” to “strongly agree” (coefficient alpha = .90).

4.6.2 Withdrawal Behaviour

An 8-item scale was used to assess the extent to which employees were likely to withdraw from their jobs, because of stress-related problems. The first four items focused on whether employees had seriously considered withdrawing from their jobs over the past month. The four items were, “Over the past month, how often have you seriously thought about putting in a worker’s compensation claim for a stress-related problem?,” “Over the past month, how often have you seriously thought about taking sick-leave for a stress-related problem?,” “Over the past month, how often have you seriously thought about changing jobs because of a stress-related problem?,” and “Over the past month, how often have you seriously considered seeking medical advice for a stress-related problem?” Employees were asked to rate each item on a 5-point scale ranging from “very often” to “rarely or never.” The next four items focused on whether employees seriously intended to withdraw from their jobs in the near future. The four items were, “Do you seriously believe that in the near future you will put in a worker’s compensation claim for a stress-related problem?,” “Do you seriously believe that you will take sick leave in the near future for a stress-related problem?,” “Do you seriously believe that you will change jobs in the near future because of a stress-related problem?,” and “Do you seriously believe that you will seek medical advice in the near future for a stress-related problem?” Employees were asked to rate each of these items on a 5-point scale ranging from “definitely not” to “definitely yes.” Principal components analysis showed that the eight items measured a single factor that accounted for 63.70% of the variance (coefficient alpha = .90).

4.6.3 Positive and Negative Work Experiences

Police officers’ positive and negative work experiences were assessed with a 109-item measure adapted from the Police Daily Hassles and Uplifts Scales (Hart *et al.*,

1995) and the Positive and Negative Work Experience Scales (Hart *et al.*, 1996). The measure used in this study assessed 8 dimensions of positive work experiences and 12 dimensions of negative work experiences. These dimensions covered both operational (e.g. exposure to danger, dealing with victims, and frustration with the criminal justice system) and organisational (e.g. management behaviour, coworker relations, and decision-making processes) experiences. This meant that we were able to assess experiences that were peculiar to the police role (i.e. job specific experiences) and experiences that were relevant to all occupational groups. As shown later in this chapter, these dimensions could be aggregated to form overall indices of Positive Work Experiences and Negative Work Experiences (coefficient alpha = .95 and .95, respectively). Although the unsworn public sector employees completed a generic version of this measure (i.e. the organisational experiences subscales), in this chapter we do not present the data that were obtained for the unsworn personnel on this measure.

The response format for the Negative Work Experiences Scale required employees to consider whether each experience (item) had occurred “as a result of their work during the past month” and, if so, how much the experience “hassled or bothered” them. Employees were then required to rate their response on a five-point scale that ranged from “definitely does not apply to me” (0) to “strongly applies to me” (4). The instructions emphasized that employees should indicate (0) if an experience did not occur, or if the experience occurred but was not a hassle or bother. This response format required employees to combine both frequency and intensity when choosing the appropriate response option. The one month time frame ensured that the typical experience of employees was assessed, given the diversity of tasks that employees can be engaged in on a day-to-day basis. Example items included ‘Going to dangerous calls’ and ‘Inadequate feedback on my performance’. The same response format was used for the Positive Work Experiences Scale, except that on this occasion employees were asked to consider the extent to which each experience made them “feel good” during the past month (Hart, 1999). Example items included ‘Helping complainants’, and ‘Receiving recognition for good work’.

4.6.4 Organisational Climate

Employees’ perceptions about seven different aspects of their work environment (appraisal and recognition, coworker interaction, goal congruency, opportunities for development, participative decision-making, role clarity, supportive leadership) were assessed using 35 items from Hart *et al.*’s, (1996) Organisational Climate Scale. This scale is based on the components of the School Organisational Health Questionnaire (Hart *et al.*, 2000) that were designed to assess organisational factors that are common to most occupational groups. Employees were asked to rate the extent to which each item (e.g. “My work objectives are always well defined”) described their particular work unit (e.g. police station or work team) on a 5-point scale ranging from “strongly disagree” to “strongly agree”. Confirmatory factor analyses showed that the seven separate dimensions could be

aggregated at a second-order level to provide an overall index of organisational climate (coefficient alpha = .96).

4.6.5. Coping Strategies

A 24-item Coping Response Inventory (Hart, 1988) was employed to assess the coping strategies used by police officers. This inventory was based on the work of Billings and Moos (1984), and measures six different dimensions of coping: Affective Regulation, Emotional Discharge, Seeking Emotional Support, Information Seeking, Logical Analysis, and Problem Solving. Moreover, Hart *et al.*, (1995) have used confirmatory factor analysis to show that the 24 coping items can be grouped at a second-order level to reflect Problem-Focused (Information Seeking, Logical Analysis and Problem Solving) and Emotion-Focused (Affective Regulation, Emotional Discharge, Seeking Emotional Support) Coping (coefficient alpha = .79 and .76, respectively).

In order to assist recall, police officers were asked to nominate the specific work event which had bothered them the most during the preceding six months, and indicate on a 5-point scale the extent to which they had used various coping strategies (items) to manage or deal with this event. Although this procedure is generally used to assess situation specific coping (Carver *et al.*, 1989), Hart (1988) found that police officers reported using similar strategies to cope with bothersome events in their work and non-work lives. Consequently, this procedure seems to assess the typical way in which police officers attempt to cope with events in their daily lives.

4.6.6. Personality characteristics

Costa and McCrae's (1989) NEO Five-Factor Inventory was used to provide a measure of Neuroticism (coefficient alpha = .82) and Extraversion (coefficient alpha = .76). Those who score high on Neuroticism are more likely to worry, and are typically nervous, emotional, insecure, inadequate and hypochondriacal. High scorers on Extraversion tend to be active, talkative, person-oriented, optimistic, fun-loving and affectionate.

4.7 RESULTS

In order to establish whether policing is, in fact, a stressful occupation, it was necessary to approach our analyses from three different perspectives. First, we examined whether there were any mean differences, in the study variables, between the sworn police officers and the unsworn public service employees, as well as between these two groups and public service employees who worked in non-police organisations. These comparisons enabled us to understand whether there were systematic differences in the average levels of occupational well-being, withdrawal behaviours, quality of organisational climate, use of emotion and

problem-focused coping strategies, and enduring personality characteristics among police officers and other occupational groups.

Second, we used confirmatory factor analytic techniques to establish whether it was police officers' operational or organisational experiences that contributed most to their levels of occupational well-being. If police work is an inherently stressful occupation, it would be reasonable to assume that negative operational experiences, such as dealing with trauma or being exposed to danger, would have the most deleterious effect on police officers' levels of well-being. If organisational experiences were found to have the most deleterious affect, however, this would indicate that the same types of experiences that are common to all occupational groups is also the primary cause of the 'stress' in police work. This would be a direct empirical challenge to the conventional view that the nature of police work makes the job inherently stressful.

Third, we used structural equation modelling to establish the relative contribution that police officers' personalities, their use of emotion and problem-focused coping strategies, the quality of their workgroup's organisational climate, and their positive and negative work experiences made to their levels of occupational well-being and withdrawal behaviour intentions. This enabled us to assess whether traditional intervention strategies, such as those focusing on police officers' coping skills (e.g. Anshel, 2000), are likely to bring about sustained improvements in police officers' levels of well-being and, if not, what strategies are likely to be most effective.

4.7.1 Mean Differences Between Police Officers and Other Occupational Groups

In Table 4.1, we list the summary statistics for each of the study variables that could be compared, in terms of mean levels, among sworn police officers, unsworn public sector employees, and general public sector employees who did not work for the police organisation. The positive and negative work experience variables were the only ones that could not be compared across the three employee groups. This was due to the fact that the unsworn and general public sector employees could not rate the operational work experiences, because these employees were not involved in operational policing tasks. A series of t-tests were conducted to examine whether the difference in the mean scores listed in Table 4.1 were statistically significant. The results of these tests are shown in Table 4.2.

As shown in Tables 4.1 and 4.2, there were no significant mean differences among the three occupational groups on Emotion-Focused Coping ($p > .10$). This indicates that the extent to which employees use emotion-focused coping strategies is similar across different occupational groups. In comparison to the unsworn public sector employees, police officers did not differ significantly on Morale, Withdrawal Behaviour, Organisational Climate, and Neuroticism ($p > .05$). There was a significant difference, however, on Distress, Problem-Focused Coping, and Extraversion ($p < .05$). These results suggest that when compared to unsworn public sector employees working in the same organisation, police officers

experienced higher levels of distress ($M = 24.86$ and 21.68 for sworn police officers and unsworn public sector employees, respectively), engaged less in problem-focused coping strategies ($M = 28.15$ and 30.53 for sworn police officers and unsworn public sector employees, respectively), and tended to be more extraverted ($M = 41.08$ and 39.96 for sworn police officers and unsworn public sector employees, respectively). There was also a significant difference, between the sworn police officers and the general public sector sample, on all study variables except Emotion-Focused Coping. In contrast, Morale was the only variable on which there was a significant difference between the unsworn and general public sector employees.

Table 4.1 Means and Standard Deviations on Study Variables for Police Officers, Unsworn Support Employees, and General Public Sector Employees.

Variable	N	Police Officers			Unsworn Employees			General Public Sector		
		M	SD	N	M	SD	N	M	SD	
Quality of Work Life	578	21.77	7.78	165	22.12	7.71	1,074	23.27	7.88	
Distress	580	24.86	8.26	167	21.68	9.56	1,087	22.13	8.80	
Morale	576	29.13	8.25	164	29.32	8.88	1,074	31.33	7.96	
Withdrawal Behaviour	579	14.14	6.36	165	13.18	6.61	N/A	N/A	N/A	
Organisational Climate	559	107.55	25.86	163	110.38	26.68	1,020	113.49	24.73	
Emotion-Focused Coping	545	18.77	9.26	139	19.18	9.24	991	18.69	9.32	
Problem-Focused Coping	545	28.15	8.33	139	30.53	8.48	1,005	30.40	8.44	
Neuroticism	573	30.90	7.40	160	31.12	7.44	1,064	31.81	8.07	
Extraversion	573	41.08	6.08	156	39.96	6.12	1,056	40.22	6.29	

Note. Unsworn employees are public sector employees working in the police organisation, whereas the general public sector data are the results for public sector employees working in non-police organisations. N/A indicates that data were not available.

The overall pattern of results suggests that police officers may, on average, experience higher levels of distress and lower levels of morale and quality of work life in comparison to other public sector employees. This raises a question about whether these differences are due to the demands of police work, the nature of the police organisation, or the way in which police officers typically deal with difficult and stressful situations. Although not answering this question directly, it is interesting to note that the sworn police officers and unsworn public sector employees both rated the climate of the police organisation as being lower than that experienced by public sector employees working in other organisations. Given that both groups of employees working in the police organisation also had lower levels of morale and quality of work life, in comparison to those who worked in other organisations, the overall pattern of results is consistent with the

notion that the police organisation plays a role in determining occupational well-being.

Table 4.2 Results of t-tests Used to Compare Means Differences Among Occupational Groups Shown in Table 1.

Variable	Police Officers v. Unsworn Employees			Police Officers v. General Public Sector			Unsworn Employees v. General Public Sector		
	t	df	p	t	df	p	t	df	p
Quality of Work Life	0.52	741	> .10	3.71	1650	< .001	1.75	1237	> .05
Distress	4.22	745	< .001	6.15	1665	< .001	0.61	1252	> .10
Morale	0.26	738	> .10	5.28	1648	< .001	2.96	1236	< .01
Withdrawal Behaviour	1.69	742	> .05	N/A	N/A	N/A	N/A	N/A	N/A
Organisational Climate	1.22	720	> .10	4.49	1577	< .001	1.47	1181	> .10
Emotion-Focused Coping	0.47	682	> .10	0.16	1534	> .10	0.59	1128	> .10
Problem-Focused Coping	2.99	682	< .01	5.04	1548	< .001	0.17	1142	> .10
Neuroticism	0.33	731	> .10	2.24	1635	< .05	1.02	1222	> .10
Extraversion	2.04	727	< .05	2.67	1627	< .01	0.49	1210	> .10

Note. Unsworn employees are public sector employees working in the police organisation, whereas the general public sector data are the results for public sector employees working in non-police organisations. N/A indicates that no comparative data were available.

4.7.2. The Influence of Operational and Organisational Experiences

Although a comparison of mean differences can sometimes provide a useful window through which to explore the nature of police stress, this approach often masks the nuances that differentiate the experience of individual employees. Aggregating information to a mean score limits our ability to examine patterns in individual variation. This can be a major methodological limitation when investigating the nature of police stress (Hart and Cooper, 2001). Accordingly, we now turn our attention to understanding the variation among individual employees, and whether systematic patterns in the experience of individual employees can inform our understanding of the determinants of police stress.

Our starting point was to use the data obtained from the 589 sworn police officers to establish the relative potency of the different operational and organisational experiences. The main aim in these analyses was to examine whether it was the operational or organisational experiences that were more important in determining police officers' levels of occupational well-being. This was achieved by using the Linear Structural Relations (LISREL VIII) Program (Joreskog and Sorbom, 1993) to test Hart *et al.*'s (1995) three-factor model of police work experiences. The structural equation analyses reported in this chapter

were all based on variance-covariance matrices and employed the maximum likelihood method of estimation. The maximum likelihood method of estimation has been shown to be robust against moderate departures from the skewness and kurtosis of the normal distribution (Cuttance, 1987). The skewness and kurtosis was less than 1.0 in absolute value for most of the study variables.

A series of nested structural equation models was estimated to explain the relations among the 8 Positive Work Experience and 12 Negative Work Experience dimensions. The first model was an independence model that assumed there was no relationship between the 20 dimensions. This model served as a base-line from which to assess the relative fit of the next two models. In the second model, we estimated a 3-factor solution that was consistent with Hart *et al.*'s (1995) theoretical model. As shown in Figure 4.3, this model asserts that the relations among the positive and negative work experiences can be explained by two underlying latent constructs that represent Positive Work Experiences and Negative Work Experiences. Moreover, the model also suggests that the positive and negative operational experiences combine to form a third latent construct that represents police officers' levels of engagement in operation police work. The third model was essentially the same as the second, but on this occasion we estimated two 'cross-loadings' and six correlations among the residual variances for the positive and negative work experience dimensions. The correlations among the residuals were between (a) PWE-Administration and PWE-Supervision; (b) NWE-Victim and NEW-Danger; (c) PWE-Victim and PWE-Offenders; (d) PWE-Management and NWE-Communication; (e) PWE-Coworkers and NEW-Coworkers; and, (f) PWE-Victims and NWE-Victims. These additional parameter coefficients were suggested by the modification indices for Model 2 and were defensible on theoretical grounds. The goodness-of-fit statistics for the three models are shown in Table 4.3, and the standardized parameter estimates for Model 3 are shown in Figure 4.3.

The goodness-of-fit statistics for Model 3 suggested that there was a good fit between the variance-covariance matrix and the tested model. Moreover, a comparison of the goodness-of-fit statistics for Models 2 and 3 showed that Model 3 was a significantly better fit to the data ($\chi^2_{diff} = 258.52$, $df_{diff} = 8$, $p < .001$). The standardized parameter estimates shown in Figure 4.3 support the notion that organisational experiences are more important than operational experiences in determining police officers' occupational well-being. This conclusion is based on the fact that the standardized beta coefficients linking the work experience dimensions to the Positive Work Experiences and Negative Work Experiences latent constructs were noticeable larger for the organisational, rather than the operational experiences. In fact, the results showed that the Negative Work Experiences latent construct explained between 3% and 21% of the variance in the negative operational experiences, but between 26% and 64% of the variance in the negative organisational experiences. Likewise, the Positive Work Experiences latent construct explained between 3% and 10% of the variance in the positive operational experiences, but between 34% and 64% of the variance in the positive organisational experiences. Moreover, the results showed that there was no

significant relationship between Positive Work Experiences and Negative Work Experiences ($r = -.01, p > .10$). This finding is consistent with a growing body of empirical evidence in the quality of life (e.g. Headey and Wearing, 1992) and occupational stress (Hart, 1999) literatures, and demonstrates the importance of taking into account both positive and negative work experiences when investigating the job characteristics that contribute to occupational well-being.

Table 4.3 Goodness-of-Fit Statistics for the Structural Equation Models Examining the Relations Among Different Dimensions of Positive and Negative Work Experiences.

Model	χ^2	df	p	RMSEA	CFI	SRMSR	GFI
Model 1: Null	4,033.37	190	< .001				
Model 2: 3-Factor	618.69	160	< .001	.08	.88	.07	.88
Model 3: 3-Factor with Modifications	360.17	152	< .001	.06	.95	.05	.93

Note. $N = 452$ (Listwise). RMSEA = Root Mean Square Error of Approximation, CFI = Comparative Fit Index, SRMSR = Standardized-Root-Mean-Square-Residual, and GFI = Goodness of fit Index.

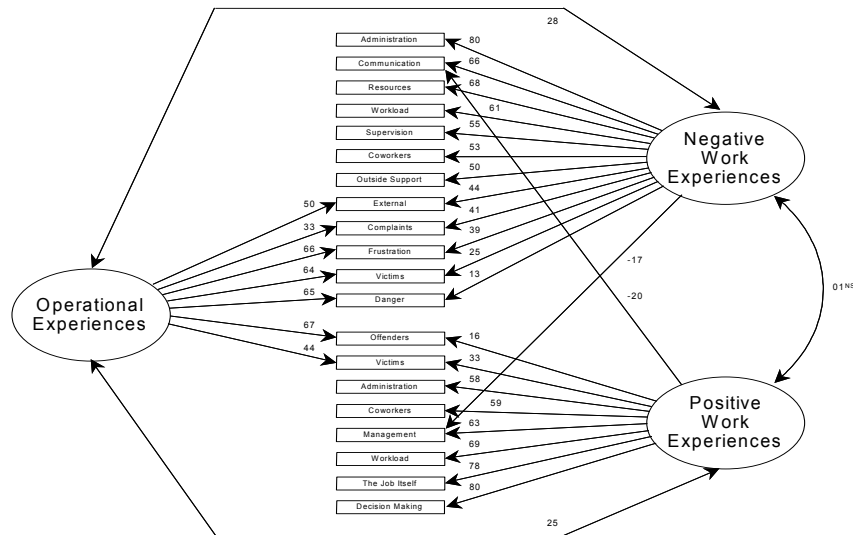


Figure 4.3 Three-Factor Model of Police Work Experiences. [Standardized parameter estimates are all significant at the .05 level, unless otherwise indicated by ^{NS}.]

In support of previous research by Hart *et al.*, (1995), it was also found that the positive and negative operational experiences could be explained, in part, by an underlying Operational Experiences latent construct. The interesting point here is that the sign of the standardized beta coefficients linking Operational Experiences with the seven operational experience dimensions were all positive. This finding calls into question the conventional view that if police officers are experiencing negative operational experiences, such as exposure to danger or traumatized victims, they are unlikely to be enjoying their jobs. These findings demonstrate that police can derive satisfaction from their operational work, even when some of their experiences are causing a degree of discomfort or distress. For example, police officers may become distressed at the trauma they observe at a fatal road accident. However, they may also derive a degree of satisfaction from being able to help injured people who may have survived the accident. In other words, the one job may have a mix of negative and positive experiences. This is also consistent with the positive correlations that were found between Operational Experiences and Negative Work Experiences ($r = .28, p < .01$) and Operational Experiences and Positive Work Experiences ($r = .25, p < .01$).

The next question to be addressed in our analyses was how do these experiences contribute to police officers' levels of distress and morale, as well as their withdrawal behaviour intentions? To address this question, we estimated two nested structural equation models that examined the relations among Operational Experiences, Positive Work Experiences, Negative Work Experiences, Distress, Morale and Withdrawal Behaviour, after controlling for the effects of Neuroticism and Extraversion. We estimated the Operational Experiences, Negative Work Experiences, and Positive Work Experience latent constructs using the confirmatory factor technique that was adopted in the previous analysis (see Figure 4.3). The unit weighted composite scores for Neuroticism, Extraversion, Distress, Morale and Withdrawal Behaviour were used as single indicators of their respective latent constructs, and measurement error was taken into account by setting the percentage of error variance at $(1 - \alpha)$. This approach has been used in previous studies (e.g. Hart, 1999). As Bagozzi and Heatherton (1994) note, this form of measurement model is satisfactory when global questions are being asked about the relations among the constructs of interest. Moreover, it was necessary to adopt this procedure for practical reasons, because each construct was measured by a large number of items.

The first model was an independence model that assumed there was no relationship between the observed variables. In the second model, we regressed Distress, Morale and Withdrawal Behaviour onto Negative Work Experiences and Positive Work Experiences. In turn, all of these latent constructs and Operational Experiences were regressed onto Neuroticism and Extraversion. The goodness-of-fit statistics for the two models are shown in Table 4.4, and the standardized parameter estimates are shown in Figure 4.4. Note that in the interests of diagrammatic clarity, the standardized beta coefficients linking Neuroticism and Extraversion to all other latent constructs in the model have been shown in Table 4.5.

Table 4.4 Goodness-of-Fit Statistics for the Structural Equation Models Examining the Relations Between Positive Work Experiences, Negative Work Experiences, Distress, Morale, Withdrawal Behaviour, Neuroticism and Extraversion

Model	χ^2	df	<i>p</i>	RMSEA	CFI	SRMSR	GFI
Model 1: Null	5,283.30	300	< .001				
Model 2: Theoretical	554.73	240	< .001	.05	.94	.05	.91

Note. *N* = 452 (Listwise). RMSEA = Root Mean Square Error of Approximation, CFI = Comparative Fit Index, SRMSR = Standardized-Root-Mean-Square-Residual, and GFI = Goodness of fit Index.

Table 4.5 Standardized Beta Coefficients Linking Neuroticism and Extraversion to withdrawal Behaviour, Distress, Morale, Negative Work Experiences, Positive Work Experiences, and Operational Experiences

Dependent Variable	Neuroticism	Extraversion
Withdrawal Behaviour	.36	.18
Distress	.49	.04 ^{NS}
Morale	-.01 ^{NS}	.26
Negative Work Experiences	.29	.03 ^{NS}
Positive Work Experiences	-.11 ^{NS}	.40
Operational Experiences	.25	.20

Note. *N* = 452 (Listwise). ^{NS} = Nonsignificant at the .05 level.

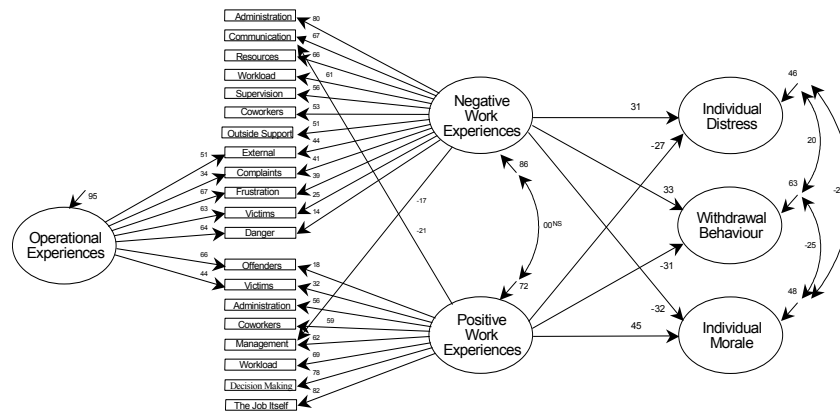


Figure 4.4 Standardized Parameter Estimates Showing the Relationship Between the Three-Factor Model of Police Work Experiences and Indices of Occupational Well-Being. [Standardized parameter estimates are all significant at the .05 level, unless otherwise indicated by ^{NS}.]

The goodness-of-fit statistics for Model 2 suggested that there was a good fit between the variance-covariance matrix and the tested model. The standardized parameter estimates showed Negative Work Experiences and Positive Work Experiences both contributed to Distress, Morale and Withdrawal Behaviour. The overall pattern of results was consistent with the notion that negative work experiences contribute more strongly than positive work experiences to distress ($\beta = .31$ and $-.27$, $p < .05$, for Negative Work Experiences and Positive Work Experiences, respectively), whereas positive work experiences contribute more strongly than negative work experiences to morale ($\beta = .45$ and $-.32$, $p < .05$, for Positive Work Experiences and Negative Work Experiences, respectively). These results were found after controlling for the effects of Neuroticism and Extraversion, and were consistent with the pattern of results that have been found in previous research (Hart *et al.*, 1995; Headey and Wearing, 1992). In terms of police officers' withdrawal behaviour intentions, however, it was found that their positive and negative work experiences made similar contributions ($\beta = .33$ and $-.31$, $p < .05$, for Negative Work Experiences and Positive Work Experiences, respectively). These findings again demonstrate the importance of taking into account both positive and negative work experiences when investigating the determinants of occupational stress.

As shown in Table 4.5, it was found that Neuroticism contributed significantly to Withdrawal Behaviour ($\beta = .36$, $p < .05$), Distress ($\beta = .49$, $p < .05$), Negative Work Experiences ($\beta = .29$, $p < .05$), and Operational Experiences ($\beta = .25$, $p < .05$), whereas Extraversion contributed significantly to Withdrawal Behaviour ($\beta = .18$, $p < .05$), Morale ($\beta = .26$, $p < .05$), Positive Work Experiences ($\beta = .40$, $p < .05$), and Operational Experiences ($\beta = .20$, $p < .05$). The pattern of relationships between the two personality constructs, occupational well-being, and work experience variables was consistent with the notion that separate positive and negative affectivity paths tend to explain the relationships among these types of variables (Hart, 1999; Hart and Cooper, 2001).

Overall, the results of the two sets of structural equation analyses demonstrated that organisational experiences were more important than operational experiences in determining police officers' levels of occupational well-being. This calls into question the assumptions that are often made about the nature of police stress. In particular, these results clearly demonstrate that the nature of police work is not inherently stressful. Rather, it is the organisational context in which police officers work that explains the differences between those police officers' who experience lower or higher levels of occupational well-being. The role of the organisational context also appears to be more important than operational experiences in determining police officers' intentions to explore different job options, seek medical advice, take sickleave, or submit workers' compensation claims, as a result of stress-related problems.

4.7.3 Comparing the Influence of Personality, Coping Strategies, Organisational Climate and Work Experiences

Our attention now turns to examining the influence of positive and negative work experiences within a broader context. A series of structural equation analyses were conducted to examine the influence that personality, coping strategies, organisational climate, and positive and negative work experiences had on police officers' levels of occupational well-being and withdrawal behaviour intentions. For the purpose of these analyses, the unit weighted composite scores for Neuroticism, Extraversion, Emotion-Focused Coping, Problem-Focused Coping, Organisational Climate, Negative Work Experiences, Positive Work Experiences, Distress, Morale, Quality of Work Life and Withdrawal Behaviour were used as single indicators of their respective latent constructs, and measurement error was taken into account by setting the percentage of error variance at $(1 - \alpha)$. It was necessary to use this approach so that the number of parameters estimated during each of the analyses was kept within acceptable limits (Bagozzi and Heatherton, 1994; Hart, 1999).

The first model was an independence model that assumed there was no relationship between the 11 latent constructs. The second model is shown in Figure 4.5. For reasons of diagrammatic clarity, this Figure only illustrates the paths that were hypothesized in the theoretical model shown in Figure 4.2. In this model, we regressed Withdrawal Behaviour onto Distress, Morale and Quality of Work Life. These, in turn, were regressed onto Negative Work Experiences, Positive Work Experiences and Organisational Climate. Negative Work Experiences and Positive Work Experiences were both regressed onto Emotion-Focused Coping and Problem-Focused Coping. Negative Work Experiences, Positive Work Experiences, Emotion-Focused Coping and Problem-Focused Coping were all regressed onto Organisational Climate. Finally, Withdrawal Behaviour, Distress, Morale, Quality of Work Life, Negative Work Experiences, Positive Work Experiences, Organisational Climate, Emotion-Focused Coping and Problem-Focused Coping were all regressed onto Neuroticism and Extraversion. We also estimated the correlations among the residuals for the three occupational well-being constructs, the residual for the work experiences constructs, and the residuals for the coping constructs. The correlation between Neuroticism and Extraversion was also estimated.

In Model 3, we reversed the order of the work experience and coping constructs. In other words, in this model we regressed Distress, Morale and Quality of Work Life onto Emotion-Focused Coping and Problem-Focused Coping. Emotion-Focused Coping and Problem-Focused Coping were both regressed onto Negative Work Experiences and Positive Work Experiences. This model reflected the traditional way in which the 'causal' order of work experiences, coping strategies and occupational well-being is often viewed. In other words, this model reflected the assumption that work experiences influence the use of coping strategies, and that coping strategies, in turn, influences occupational well-being.

Models 4 and 5 imposed equality constraints on Model 2 to test Propositions 3 and 4. In Model 4, we imposed an equality constraint on the paths that linked Negative Work Experiences and Positive Work Experiences to Distress. This enabled us to test the hypothesis that Negative Work Experiences made a stronger contribution than Positive Work Experiences to Distress. In Model 6, we imposed an equality constraint on the paths that linked Negative Work Experiences and Positive Work Experiences to Morale. This enabled us to test the hypothesis that Positive Work Experiences made a stronger contribution than Negative Working Experiences to Morale. Where necessary, the observed variables were reverse-scored before we estimated the models that contained the equality constraints. This was necessary to ensure that the equality constraints were imposed on paths of the same sign. The standardized beta coefficients for the key hypothesized paths in Model 2 are shown in Figure 4.3. The goodness-of-fit statistics for all models are shown in Table 4.6, and the standardized beta coefficients linking Neuroticism and Extraversion to all other latent constructs in the model are shown in Table 4.7.

The goodness-of-fit statistics for Model 2 suggested that there was an excellent fit between the variance-covariance matrix and the tested model. Moreover, a comparison of the goodness-of-fit statistics for Models 2 and 3 showed that the hypothesized model was a better fit to the data than the model depicting the more traditional way of viewing the relationships between work experiences, coping strategies, and occupational well-being. This conclusion is based on the fact that the chi-square statistics showed that there was no significant discrepancy between Model 2 and the observed data ($p > .05$), whereas there was a significant discrepancy between Model 3 and the observed data ($p < .05$). It was not possible to use the chi-square difference test to compare the relative fit of Models 2 and 3, because the two models were not nested. These results were consistent with Proposition 4, and support earlier findings (Hart *et al.*, 1995) that

Table 4.6 Goodness-of-Fit Statistics for the Structural Equation Models Examining the Relations Between Withdrawal Behaviour, Occupational Well-Being, Work Experiences, Organisational Climate, Coping Strategies, and Personality.

Model	χ^2	df	p	RMSEA	CFI	SRMSR	GFI
Model 1: Null	1,921.38	55	< .001				
Model 2: Theoretical Model	16.22	11	0.13	.03	1.00	.02	.99
Model 3: Traditional Model	35.09	11	< .001	.07	.99	.02	.99
Model 4: Distress	16.21	12	0.18	.03	1.00	.02	.99
Model 5: Morale	20.90	12	0.05	.03	1.00	.02	.99

Note. $N = 420$ (Listwise). RMSEA = Root Mean Square Error of Approximation, CFI = Comparative Fit Index, SRMSR = Standardized-Root-Mean-Square-Residual, and GFI = Goodness of fit Index. Model 3 was the traditional model where coping strategies mediated the relationship between work experiences and occupational well-being, Model 4 tested whether Negative Work Experiences contributed more strongly than Positive Work Experiences to Distress, and Model 5 tested whether Positive Work Experiences contributed more strongly than Negative Work Experiences to Morale.

Table 4.7 Standardized Beta Coefficients Linking Neuroticism and Extraversion to Withdrawal Behaviour, Occupational Well-Being, Work Experiences, Organisational Climate and Coping Strategies.

Dependent Variable	Neuroticism	Extraversion
Withdrawal Behaviour	.32	.29
Quality of Work Life	-.18	.03 ^{NS}
Distress	.49	.02 ^{NS}
Morale	-.04 ^{NS}	.31
Negative Work Experiences	.17	.14
Positive Work Experiences	.03 ^{NS}	.25
Organisational Climate	-.21	.22
Emotion-Focused Coping	.47	.30
Problem Focused Coping	.16	.27

Note. *N* = 420 (Listwise). ^{NS} = Nonsignificant at the .05 level.

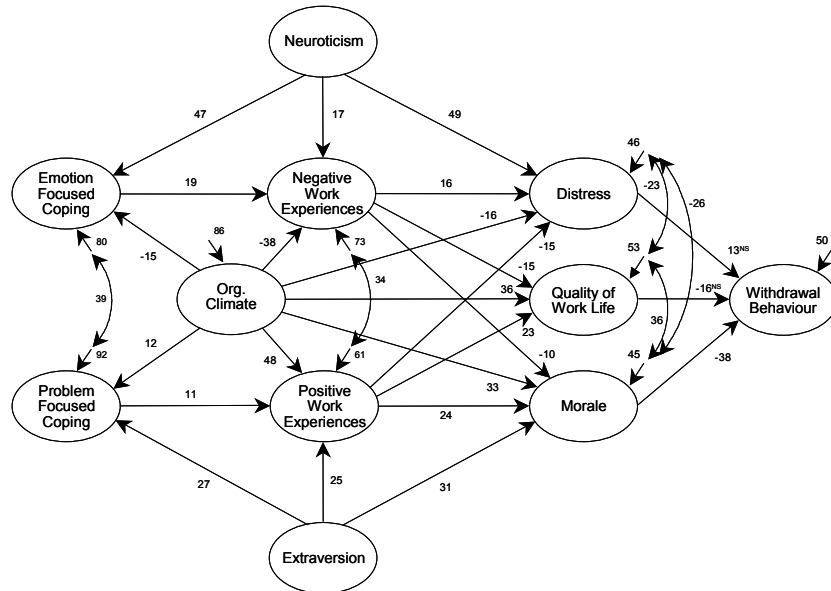


Figure 4.5 Standardized Parameter Estimates for the Organisational Health Research Model. [Standardized parameter estimates are all significant at the .05 level, unless otherwise indicated by ^{NS}.]

suggest employees reconstruct history when completing work experience measures (Lazarus, 1990) and, as such, these should mediate the relationship between measures of coping and occupational well-being (Hart and Cooper, 2001). Within the context of the cognitive-relational theory of stress (Lazarus and Folkman, 1984), this implies that measures of work experiences actually assess employees'

reappraisals of potentially stressful situations, rather than the primary appraisals that trigger the stress process. This is consistent with the notion that employees have already coped with the events, to some degree, before they are asked to report their experience of these events.

Given that Models 4 and 5 were nested within Model 2, it was possible to use the chi-square difference test to examine their relative fit. According to the chi-square difference tests, there was no significant difference between the fit of Models 2 and 4 ($\chi^2_{\text{diff}} = 0.01$, $df_{\text{diff}} = 1$, $p > .05$). These results failed to support Proposition 2, in as much as the beta coefficient linking Negative Work Experiences to Distress ($\beta = .16$) was not significantly different from the beta coefficient linking Positive Work Experiences to Distress ($\beta = -.15$). A chi-square difference test showed, however, that there was a significant difference between the beta coefficient linking Positive Work Experiences to Morale ($\beta = .24$) and the beta coefficient linking Negative Work Experiences to Morale ($\beta = -.10$) ($\chi^2_{\text{diff}} = 4.68$, $df_{\text{diff}} = 1$, $p < .05$). This results supported Proposition 3.

The standardized beta coefficients for Model 2 also supported Proposition 1. It was found that Organisational Climate contributed to Positive Work Experiences and Negative Work Experiences. Moreover, the results showed that Organisational Climate explained 23% of the variance in Positive Work Experiences and 14% of the variance in Negative Work Experiences. This was noticeably more than the variance explained by stable personality characteristics. As shown in Table 4.7, it was found that Extraversion explained 6% of the variance in Positive Work Experiences and 2% of the variance in Negative Work Experiences, whereas Neuroticism explained 3% of the variance in Negative Work Experiences and was not related significantly to Positive Work Experiences. This supports Hart's (1999) contention that measures of daily work experiences reflect conditions in the work environment, more than they reflect employees' stable personality characteristics and, as such, are not overly contaminated by the negative and positive affectivity bias that has often been raised as a major limitation of self-report measures of work experiences (Costa and McCrae, 1990; Brief *et al.*, 1993; Williams *et al.*, 1996).

These results also showed the central role that was played by organisational climate. Consistent with the theoretical model proposed by Hart and Cooper (2001), it was found that Organisational Climate was also related significantly to Emotion-Focused Coping ($\beta = -.15$), Problem-Focused Coping ($\beta = .12$), Distress ($\beta = -.16$), Morale ($\beta = .33$), and Quality of Work Life ($\beta = .36$). The overall pattern of results suggests that police officers' engage in both emotion and problem-focused coping strategies to help them manage or deal with day-to-day organisational experiences. These coping strategies, in turn, influence police officers' positive and negative work experiences, and it is these experiences, along with organisational climate that contributes to police officers' levels of occupational well-being. In terms of the cognitive-relational theory of stress, this pattern of relationships is consistent with the notion that organisational climate reflects primary appraisals, emotion and problem-focused coping reflect secondary

appraisals, and that positive and negative work experiences reflect police officers' reappraisals.

Interestingly, it was found that there was a significant positive relationship between Emotion-Focused Coping and Negative Work Experiences. This implies that when police officers engage in emotion-focused coping strategies, it is likely to make matters worse, rather than better. The results showed, however, that the use of problem-focused coping strategies was more adaptive, in that the use of these strategies resulted in more positive work experiences. An example, based on an overload of paperwork, may help to illustrate these findings. A police officer may arrive at work to find that they have a large amount of paperwork that should have been attended to a few days earlier. This may cause them to experience a degree of discomfort or distress. If the officer chose to engage in emotion-focused coping strategies to deal with this situation, the results suggest that this would increase the level of discomfort and distress associated with their incomplete paperwork and level of work demands. This could be explained by the fact that while the officer is focusing on managing his or her emotions (e.g. by using relaxation techniques), the paper work is not being addressed and is becoming more and more overdue. If the officer were to deal with the problem, however, by completing the paper work and, maybe, examining their time-management or prioritization of work tasks, the results suggest that this would lead the officer to feel positive about their work. This example also explains why police officers can experience both negative and positive emotions associated with their workloads (see Figure 4.3). Of course, this example assumes that police officers choose one strategy over another. The results shown in Figure 4.5, however, show that if police officers use one type of coping strategy, they are also likely to use the other type of strategy. This conclusion is based on the fact that the correlation between Emotion-Focused Coping and Problem-Focused Coping was .39 ($p < .01$). Moreover, consistent with previous research (Hart *et al.*, 1995; Heady and Wearing, 1990), it was found that there was no significant relationship found between Emotion-Focused Coping and Positive Work Experiences ($\beta = .07, p > .05$), nor between Problem-Focused Coping and Negative Work Experiences ($\beta = .04, p > .05$).

It was also noteworthy that Withdrawal Behaviour was determined by Morale, rather than Distress. Whereas the results showed that Morale explained 14% of the variance in Withdrawal Behaviour, there was no significant relation linking Withdrawal Behaviour to Distress ($\beta = .13, p > .05$) and Quality of Work Life ($\beta = -.16, p > .05$). This finding runs contrary to the conventional view that psychological distress contributes to the absenteeism and workers' compensation claims that result from occupational stress. Instead, this finding suggests that stress-related absenteeism and workers' compensation claims are driven more by the absence of morale (e.g. employees lack of energy, enthusiasm and pride in their work), rather than the presence of distress.

In order to test Propositions 5 and 6, we examined the total effects that were based on the pattern of relationships shown in Model 2. The standardized total effects are shown in Table 4.8 and showed that Neuroticism was the strongest

determinant of Distress (standardized total effect = .60) and Withdrawal Behaviour (standardized total effect = .51). Organisational Climate, however, was found to be the strongest determinant of Morale (standardized total effect = .49) and Quality of Work Life (standardized total effect = .54). Moreover, Organisational Climate was the second strongest determinant of Distress (standardized total effect = -.36) and the third strongest determinant of Withdrawal Behaviour (standardized total effect = -.32). Interestingly, examination of the total effects showed that Emotion-Focused Coping and Problem-Focused Coping failed to make a significant contribution to Distress, Morale, Quality of Work Life and Withdrawal Behaviour ($p > .01$). Overall, the total effects supported Propositions 4 and 6.

Table 4.8: Standardized Total Effects Showing the Relative Contribution of the Predictor Variables to Police Officers' Levels of Occupational Well-Being and Withdrawal Behaviour Intentions.

Predictor Variable	Withdrawal Behaviour	Quality of Work Life	Distress	Morale
Quality of Work Life	-.16 ^{NS}			
Distress	.13 ^{NS}			
Morale	-.38			
Negative Work Experiences	.10	-.19	.16	-.13
Positive Work Experiences	-.15	.25	-.16	.24
Organisational Climate	-.32	.54	-.36	.49
Emotion-Focused Coping	.01 ^{NS}	-.02 ^{NS}	.02 ^{NS}	-.01 ^{NS}
Problem-Focused Coping	-.01 ^{NS}	.02 ^{NS}	-.01 ^{NS}	.02 ^{NS}
Neuroticism	.51	-.32	.60	-.16
Extraversion	.08 ^{NS}	.18	-.07 ^{NS}	.46

Note. $N = 420$ (Listwise). ^{NS} = Nonsignificant at the .05 level.

4.8 DISCUSSION

The results of this study clearly demonstrate that organisational factors, particularly those related to organisational climate, were the most influential determinants of occupational well-being among police officers. Accordingly, these findings indicate that police officers' levels of occupational well-being will only be improved if there is a focus on improving the leadership and management practices, as well as the organisational structures and processes (e.g. appraisal and recognition processes, decision-making styles, clarity of roles, goal alignment, etc.), that underpin the climate of police stations and other work teams within police organisations. In fact, the results shown in Table 4.8 demonstrate that a 10% improvement in the organisational climate of this particular police organisation would lead to a 3.6% decrease in distress, a 4.9% improvement in morale, a 5.4% improvement in quality of work life, and a 3.2% decrease in police officers' intentions to seek medical advice, leave their current job, take sickness absence, or submit a workers' compensation claim for stress-related problems.

Moreover, the central role of organisational climate is supported by the results showing that organisational experiences are more important than operational experiences (i.e. the specific nature of police work, including dealing with danger and victims) in determining police officers' levels of well-being. These findings are consistent with the results that have been found in other occupational groups (e.g. Griffin *et al.*, 2000; Hart, 1994; Hart *et al.*, in press), and demonstrate that police officers are really no different to employees in other occupational groups, when it comes to the issue of occupational well-being.

The notion that police organisations are similar to many other organisations, in terms of the issues that contribute to the well-being of employees, suggests that the strategies used to improve organisational climate and well-being in other organisations will also have relevance in police organisations. This point is worth noting, because police officers have often informed us that their situation is quite unique and different to what goes on in other organisations. This view is clearly not supported by the results of the present study.

One of the strategies for improving occupational well-being that has been used in other organisations is the use of regular employee opinion surveys that are used to build accountability among managers for the development of their people management practices. For example, many Australian organisations in the public and private sector are now conducting regular employee opinion surveys to obtain information that is linked to performance management systems (e.g., balanced score cards) and used to inform ongoing improvements in people management practices. Longitudinal evidence is starting to emerge, showing that when regular employee opinion surveys are linked to an organisation's accountability (i.e. performance management) and development (e.g. improvements in leadership behaviour) frameworks, it is possible to achieve sustained improvements in leadership and managerial practices, organisational climate, and occupational well-being among employees (e.g. Hart, 2000).

The results of the present study also call into question the value of many traditional stress management training programs that focus on teaching employees how best to cope with stressful situations in the workplace. These types of programs often focus on a range of emotion- and problem-focused coping strategies, such as time management and stress relaxation training. The findings of this study, however, suggest that on the whole, coping skills exert a negligible influence over police well-being outcomes. Considering the relatively much stronger contribution of organisational factors, individual stress management approaches are likely to be of much less benefit overall than organisationally oriented interventions. It should be noted, however, that we have not explored the potential moderating effects of emotion- and problem-focused coping strategies, and have examined a normative, rather than clinical sample of police officers. Nevertheless, these findings caution against the use of organisation-wide stress management training programs, unless there is evidence from within the organisation to demonstrate that they will add value.

Our results also showed that neuroticism was the strongest determinant of distress among police officers. This result is consistent with the findings in the negative affectivity literature (e.g. Burke *et al.*, 1993; Moyle, 1995; Williams *et*

al., 1996), and raises the question about what can be done, from an organisational perspective, to address the influence of personality factors. Although the temptation is to consider personality screening during selection and placement processes, this may not necessarily be the most appropriate response. It has been shown for example, that the enduring personality characteristic of neuroticism has little, if any, effect on performance outcomes (Barrick and Mount, 1991). There is also little empirical evidence to support the notion that distress contributes to sickness absence and workers' compensation claims for stress-related injuries (e.g. George, 1989; Hart *et al.*, in press). This is consistent with the current findings that showed that withdrawal behaviour intentions were related to the absence of morale, rather than the presence of distress. Accordingly, there are no strong grounds for adopting personality screening as a method of reducing distress among employees.

The central importance of organisational climate, as well as the findings that withdrawal behaviour (intention to submit a compensation claim for stress) was more strongly influenced by the lack of morale rather than the presence of distress, raises issues about how best to support police officers' who are exposed to traumatic and distressing operational incidents. This is also an important issue to address in light of the current controversy in the clinical literature over the status of workplace critical incident debriefing practices. A growing number of studies have found that employee involvement in debriefing following exposure to distressing operational incidents is not associated with any positive impact on clinical outcomes (e.g. Carlier *et al.*, 2000; Hobbs *et al.*, 1996; Bisson *et al.*, 1997). Such findings must be reconciled with the fact that participants in debriefing processes typically report high levels of satisfaction (e.g. Armstrong *et al.*, 1998). The current findings suggest that debriefing practices may actually be most effective when they are oriented towards the provision of social and organisational support, rather than focusing on clinical issues. In other words, we can reconceptualize debriefing as an organisational rather than a clinical intervention; as a gesture of support to employees which likely impacts on morale rather than on distress levels. As such, appropriately re-oriented forms of debriefing practice may still have a useful role to serve in the workplace, albeit not as a clinical intervention. Such a reconceptualization, we suggest, opens up a promising avenue for further research investigating the efficacy of various components of debriefing practice and their role in the workplace management of trauma.

Similarly, these results may help to clarify the conflicts that the second author has frequently observed in clinical contexts between treatment providers and clinicians assessing stress-related workers compensation claims. For example, a common presenting 'trauma' profile involves a police officer with a history of attendance at various operational incidents. The assessment process reveals that the major trigger for the claim is actually disgruntlement over a management decision, career progression issues, or other related contemporary organisational concerns. However, these concerns have been inadvertently obscured by treating stress professionals who presume that operational experiences exert the strongest influence on occupational well-being. As such, it is common for an officer's employment history to be reframed through an iatrogenically fostered re-

attribution process. In other words, the clinician, through encouraging a focus on reviewing past operational incidents, unwittingly influences the officer to recontextualize and link his or her current distress to past incidents that did not have any particular negative impact at the time. We suggest that the assessment and clinical management of work-related stress conditions may be advanced through better integration of the work psychology, stress and occupational clinical literatures, and by treating providers paying closer attention to research findings in all of these areas.

Our results further suggest that stressors and strain studies can be misleading in terms of guiding priorities for intervention resources. The focus on negative experiences, coping and other individual level factors does not allow the relative potency of these factors to be adequately assessed. The present study has demonstrated that there is a need to take a broader perspective so that a system of variables can be examined to determine which factors are the most important determinants of individual well-being outcomes. Such an approach provides a much more comprehensive basis for prioritizing interventions that will actually make a difference.

Although our results were consistent with prior research among police officers (e.g. Hart *et al.*, 1995), as well as other occupational and community groups (e.g. Griffin *et al.*, 2000; Heady and Wearing, 1992), there are a number of limitations that should be considered when interpreting our results. First, it should be noted that the present study utilized a cross-sectional design. As such, it is not possible to draw conclusions about causation. At best, we are able to state that our data are consistent with a causal theory. Nevertheless, it is important to replicate these findings with longitudinal data that enables an investigation of stability and change among the variables that were included in the research model (e.g., Hart, 1999). Second, the present study used a self-report survey methodology, and this always raises concerns about common method bias. However, common method bias is not likely to have played a major role in the current study, because the pattern of relationships among the study variables showed that there was strong discrimination in police officers' responses. For example, the zero correlation shown in Figure 4.3 between Positive Work Experiences and Negative Work Experiences cannot be consistent with common method bias. Nevertheless, future studies should consider the use of third-party ratings and the use of objective data about withdrawal behaviours (e.g. actual sickness absence data). Third, the sample size for the unsworn public service employees working in the police organisation was relatively small. This prevented us from testing the research model with this occupational group. Given our claim that the results suggest police officers' are no different to other employees, in terms of the issues that affect occupational well-being, it is important to replicate the results for the research model with data obtained from other occupational groups (e.g., Hart, Cotton, Wearing, & Cooper, 2002).

Notwithstanding these limitations, the present study has provided strong empirical evidence that calls into question a number of common assumptions about police stress. We found that the weight of evidence runs counter to the stereotypic views of police stress in that police officers appear to be just the same as any other

occupational group in terms of the issues that affect occupational well-being. This demonstrates the importance of conducting research and challenging conventional views, because a reliance on conventional views and folklore can be quite misleading and lead to the implementation of policies and practices that are unlikely to bring about sustained improvements in occupational well-being among police officers.

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