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**Confronting the Threat of Organizational Downsizing:
Coping and Health**

by

Mary Anne Robblee, M.A.

**A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfilment of
the requirements for the degree of**

Doctor of Philosophy

**Department of Psychology
Carleton University
Ottawa, Ontario
September 19, 1997**

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Acceptance of the thesis:

**“Confronting the Threat of Organizational Downsizing:
Coping and Health”**

submitted by

Mary Anne Robblee

in Partial fulfillment of the requirements for
the degree of Doctor of Philosophy

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Carleton University
October, 1997

ABSTRACT

There is a paucity of empirical research concerning the role of coping processes and health-related outcomes for individuals confronting organizational downsizing. This research was concerned with the effects of downsizing on health and was framed within the theoretical model of coping and health proposed by Lazarus and Folkman (1984, 1987). An examination of the effects of monitoring and blunting coping styles, coping resources (i.e., situational efficacy beliefs, perceived control, perceived organizational support, health behaviours), coping responses, and stress appraisals (i.e., job insecurity and job role stress) on psychological and physical health, as well as on organizational affective well-being was conducted using a sample (n=224) of federal government employees during the second year of a 3-year downsizing threat. Statistical analyses controlled for the influence of demographic variables (age, gender, tenure, job classification) and Negative Affectivity (NA). The demographic control variables did not significantly contribute to variance explained in health outcomes. NA was a powerful predictor of health reports. Negative appraisals of work-related factors (i.e., job role stress appraisals comprised of role conflict, ambiguity and overload) contributed significantly to explained variance in physical health outcomes, whereas organizational affective well-being (i.e., job satisfaction, affective commitment) was significantly influenced by both job insecurity and job role stress appraisal measures. Coping was not consistently related to either physical or psychological health outcomes. Organizational coping resources, such as Perceived Organizational Support (POS), and coping by

seeking information regarding the specifics of downsizing were found to demonstrate significant and independent effects on organizational affective well-being. The results demonstrate the importance of controlling for NA in the measurement of coping, work-related stress appraisal and health and organizational outcomes in a downsizing environment and suggest that measurement of (or control for) NA is a necessary requisite for all future studies concerned with specific stressors and health. The results demonstrate the significant influence of job role stress appraisals on physical health reports, as well as the significant influence of downsizing stress appraisal variables, POS and information seeking coping on organizational affective well-being outcomes independent of NA.

DEDICATION

This thesis is dedicated to my brother.

Bradley Robblee.

and to my cousin, David Savage.

who died accidentally

at ages 24 and 14

during the completion of this degree.

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Glossary of Abbreviations

CHIPS	Cohen & Hoberman Inventory of Physical Symptoms
HBC	Health Behaviours Checklist
JDI Scale	Job Design Inventory (Job Satisfaction)
MBSS	Miller Behavioural Style Scale - Monitoring & Blunting Coping Style
NA	Negative Affectivity
PC	Perceived Organizational Control
POS	Perceived Organizational Support
S-Anxiety	STAI State Anxiety Inventory (Form Y)
T-Anxiety	STAI Trait Anxiety Inventory (Form Y)

Confronting the Threat of Organizational Downsizing:

Coping and Health

Introduction and Theoretical Rationale

Downsizing and restructuring have been defined as deliberate organizational initiatives to reduce the workforce with the intention of improving organizational performance, managing declining resources, or strategically repositioning the organization (Kozlowski, Chao, Smith, & Hedlund, 1993). Between 1995 and 1998, more than one hundred thousand federal public servants across Canada will lose or will have lost their job as a result of the largest and most significant downsizing initiative in the history of the Canadian federal government. Job layoff, while a major means of downsizing, is not the only manner in which downsizing and restructuring is achieved. Strategies to reduce the federal government workforce include attrition without replacement, financial packages to encourage early retirement, and transfers to privatized functions through employee "buy-out" packages. Also common to the government downsizing and restructuring environment is involuntary redeployment through reclassification, elimination of job assignments, altered work schedules, and job transfers (Kozlowski et al., 1993).

The threat of massive downsizing and restructuring in the Canadian federal government is an external stressor for individual public servants and may represent an uncontrollable threat because regardless of the actions of the individual, he or she will not be able to influence whether or not layoff, job loss or involuntary deployment will occur.

Miller (1981) defines an event as uncontrollable if the probability of the event given a particular response is the same as the probability of the event in the absence of that response. In contrast, she defines an event as controllable when the individual can make an instrumental response which somehow modifies it (Miller, 1981).

Downsizing has been a major trend in western corporate economics for over a decade (Kozlowski, et al., 1993). Indeed, between 1987 and 1991, more than eighty-five percent of Fortune 1000 firms downsized, affecting more than five million white-collar jobs (Cameron, Freeman, & Mirshra, 1991 cited in Brockner, Wiensfield, Reed, Grover & Martin, 1993) and by 1997, downsizing had become commonplace at all levels of government across North America. Barnett (1995) estimates that one half of the North American workforce is presently working in a downsized environment. There is, however, a paucity of empirical research concerning the role of different coping efforts and health-related outcomes for individuals confronting organizational downsizing (Ashford, 1988; Ashford, Lee, & Bobko, 1989; Brockner, 1990; Brockner, Wiesenfeld, Reed, Grover, & Martin, 1993; Cameron, Freeman & Mishra, 1991).

Given the growing prevalence of downsizing and restructuring in organizations and governments, it is of both theoretical and empirical interest to explore employees' cognitive and behavioural coping processes during major organizational change and threats to job security. Empirical insights into how employees are faring, and uncovering factors linked to both adaptational and maladaptational health outcomes during downsizing are likely to extend current theory and understanding within both the areas of organizational and health psychology. Previous research within both organizational and

health psychology has identified a number of coping styles, resources, and coping efforts that have been shown to be influential in stress appraisal and health and organizational outcomes (Holahan & Moos, 1990; Jones, Flynn, & Kelloway, 1995; Miller, 1992, 1993; Taylor, 1995). Empirical examinations of these coping styles, resources and efforts in the face of organizational downsizing threat may help clarify the role they play in health and organizational outcomes when the stressor is of a longer term chronic nature (i.e., downsizing threat spanning a three year time period). In addition, the empirical information which such research is likely to uncover may assist and guide future organizational initiatives oriented towards fostering the well-being of employees during similar organizational changes.

This research is concerned with a number of questions about the effects of organizational downsizing on health. What person and environmental factors preserve or protect psychological and physical health of individuals confronting downsizing? How are these factors related to coping styles? While the threat of job loss, job insecurity and change owing to downsizing will be experienced by many as stressful, adaptive coping processes and resources may play a role in reducing the possible negative health-related consequences of this stressor.

Within the study of health psychology, and more recently organizational psychology, there is a growing concern with and interest in the adaptive qualities and processes responsible for stress-illness resistance (i.e., fostering or maintaining health in the face of stressors) (Antonovsky, 1990; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Holahan & Moos, 1990; Jones et al., 1995; Kobasa, 1982, Miller, 1992).

For example, in health psychology, research on monitoring (i.e., information seeking) and blunting (i.e., distracting) coping styles, have been shown to influence outcomes with respect to health, affect and behaviour in both controllable and uncontrollable threat situations (Miller & Birnbaum, 1988; Miller, 1987, 1992). The evidence suggests that both monitoring and blunting coping styles possess adaptive and maladaptive value, depending not only on the characteristics of the stressor being confronted, but also on a number of person factors, such as the rigidity and flexibility with which attention is focused towards or away from the stressor situation (Miller, 1993). Within organizational psychology, perceived organizational support (POS), a construct that taps employees' beliefs concerning the extent to which the employer provides a supportive organizational culture (Eisenberger, Huntington, Hutchison & Sowa, 1986; Eisenberger, Fasolo, & Davis-Lamastro, 1990), has been shown to mediate the experience of job stress (Jones et al., 1995).

Growing interest in the mechanisms through which coping is linked to health has followed the recent adoption of theoretical interactional models of coping and health in stress-related research. In the health psychology and organizational psychology literatures, models of stress and health which recognize the role of both person and situational-environmental factors on coping and health-related outcomes are prevalent (Endler, Parker, & Summerfeldt, 1993; Lazarus & Folkman, 1987; Taylor, 1995; Steptoe, 1989). One of the most influential and widely applied of these interactional models of psychological stress and coping is the one proposed by Lazarus and his colleagues (Lazarus & Folkman, 1984, 1987). Their interactional model and theory identifies two

coping processes: (1) cognitive appraisal, in which primary appraisal (what is at stake) and secondary appraisal (coping options, resources, past experiences) "converge to determine whether the person-environment is regarded as significant for well-being, and if so, whether it is primarily threatening (containing the possibility of harm or loss), or challenging (holding the possibility of mastery or benefit)" and (2) coping, "defined as the person's constantly changing behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the person's resources" (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986, p. 993). This suggests that cognitive appraisals can influence whether a stressor is viewed as positive, benign or threatening and, when appraised as threatening, the coping strategies or cognitive and behavioural efforts employed by individuals may influence the adaptational and maladaptational nature of coping and health outcomes. For example, Holahan and Moos (1990), in a series of longitudinal empirical examinations of the adaptive characteristics of coping under high levels of stress and health outcomes measured one year later, reported that lower levels of physical and emotional health problems were found for individuals who relied less on avoidant coping than active coping. Their results also suggested that active coping was found to be most beneficial when accompanied by personal and social support resources, such as confidence and self-efficacy, an easy-going disposition, and the availability of family support (Holahan & Moos, 1990).

The interactional models of health arising out of the health psychology area are based on the idea that relationships among psychological, behavioural, environmental, and biological factors act as influential forces on health and well-being (Endler & Parker,

1990, 1994; Endler et al., 1993; Lazarus, 1991; Lazarus & Folkman, 1984; Steptoe, 1989). Researchers in the area all share the perspective that coping processes and internal and external resources play an important role in person-environment transactions serving either to reduce or increase the experience of stress and biopsychosocial health functioning. Further, both subjective and objective features of particular stressor situations are recognized for their independent as well as interactional influences on psychological distress and health complaints (Taylor, 1995). For example, Taylor (1995) outlined a model of the stress-illness relationship which suggests that while cognitive and behavioural coping efforts (including health behaviours such as exercise and not smoking) are important elements in moderating health-illness relationships, they are not the only influences which determine adaptive and maladaptive outcomes. Moreover, she suggests that characteristics of the situation (or environment) may increase the probability that stress will be appraised or experienced. Her review of empirical stress research suggests that the following aspects of stressful events may increase the likelihood that they will be appraised and experienced as stressful: events which are negative versus positive (e.g., job loss versus getting a job promotion); uncontrollable and unpredictable versus controllable and predictable events; ambiguous and overly demanding events which include jobs characterized by role ambiguity, overload, and conflict; and events which challenge important aspects of life functioning (e.g., financial setbacks which interfere with one's livelihood) (Taylor, 1995).

The intensity, duration and anticipation of the stressor may also influence stress reactions and longer term health consequences. For example, chronic longer term

stressors have been linked to both chronic strain reactions accompanied by compromised immunological functioning and adaptational habituation outcomes (Anisman & Zacharko, 1982; Taylor, 1995).

Past research that focused on the characteristics of the stressor and health outcomes without considering reciprocal person-environment relationships has been challenged. For example, the literature that links life-stress to illness (Brown & Harris, 1989; Dowrenwend & Dowrenwend, 1974, 1984; Rabkin & Struening, 1976) has been criticized for the low magnitude of relationship between stressful life events and adverse health outcomes (r^2 s ranging from .01 to .09) and for failing to account for or isolate those cases which do not result in physical or psychological distress in the face of stressful life events (Cohen & Edwards, 1989; Cohen & Wills, 1985; Kobasa, 1979; Maddi, Bartone & Puccetti, 1987; Maier, Laudenslanger & Ryan, 1985; Miller, 1989). The literature on a more specific life-stressor, job stress, has produced similar patterns of low to weak relationships among job demands, organizational characteristics and health-related outcomes and the recognition that not all employees under the same job demands and job environments suffer the same health consequences (for a review see Ganster & Schaubroeck, 1991). These findings suggest a sizable degree of individual differences in health-illness outcomes in response to stressful life and/or occupational events, and have fuelled growing research interest in the possible factors which act to either mitigate or buffer illness outcomes.

As a consequence, a plethora of variables has been purported to exercise moderating and mediating roles on the illness-provoking effects of stress. Moderators or

buffering factors in stress-health relationships refer to those aspects of persons and coping processes and resources which attenuate or reduce the negative impacts on health in high stress situations but show little or no effect when stress is low or absent (i.e., interactive effects). Mediating factors in stress-health relationships refer to characteristics of persons, their coping resources and/or environments which, when present, exert beneficial (or negative) influences on health and stress outcomes irrespective of the level or severity of the stressful situation (i.e., main effects) (Aldwin & Revenson, 1987; Finney, Moos, Cronkite, & Moos, 1984; Taylor, 1995).

Proposed moderators and mediators on the illness-provoking effects of stress have ranged from physiological and immunological differences in response to stress (Maier, Laudenslager & Ryan, 1985; Steptoe, 1989; Stein & Miller, 1993) to differences in social resources, medical histories, personality or trait-like dispositions (Antonovsky, 1979, 1987, 1990; Friedman, 1991; Kobassa, 1979, 1990; Kobasa, Maddi & Courington, 1981; Ouellette, 1993; Rosenbaum, 1990) and to the joint interaction of personality and coping strategies in various stress and environmental conditions (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986; Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus, 1991, 1993; Moos & Schaefer, 1993; Pychyl, 1986; Scheier & Carver, 1995, 1987). In general, the following constructs have been found to be associated with psychological and physical well-being: hardiness (comprising the characteristics commitment, control and challenge) (Kobasa, 1979; Ouellette, 1993); coherence or a sense that the world is understandable, manageable and meaningful, which includes the belief that one has adequate personal and social resources to meet environmental

demands (Antonovsky, 1987); learned resourcefulness (i.e., with underlying self-control and self-monitoring skills) (Rosenbaum, 1990); and dispositional optimism (a general expectancy for positive outcomes, especially in difficult or ambiguous situations) (Friedman, 1991; Scheier & Carver, 1985, 1987). Many (if not all) of these constructs reflect cognitive appraisal patterns made up of different combinations of positive expectations and efficacy beliefs with respect to perceived control, meaning, challenge, commitment and life perspective.

In line with the coping and health model proposed by Lazarus (Lazarus, 1991, Lazarus & Folkman, 1984, 1987) these appraisal patterns influence whether or not a stressor will be viewed as threatening (i.e., primary and secondary appraisals). In turn, these appraisals may influence coping efforts and health outcomes. If so, these constructs may be tapping into important cognitive coping processes and resources that may alter and reduce the experience of stress in stressful situations. Indeed, the major models of health recognize the complex interplay between psychosocial demands (e.g., intensity, chronicity, predictability and controllability of the situation) and psychosocial resources (e.g., cognitive appraisal, coping, social network/support and personality) on psychobiological responses in a number of inter-related spheres (i.e., cognitive, affective, behavioural, autonomic, endocrine, and immunological) (Steptoe, 1989). Person-environment factors which influence cognitive appraisal and the interpretation and experience of stress in stressful situations are important elements in stress-health relationships. For example, it has been suggested that once stress is experienced, it can act on a number of physiological systems (e.g., the sympathetic-adrenomedullary system,

the pituitary-adrenocortical system, the neuro-peptide system, and the immune system) and with chronic stress or damage to these pathways, illness may result if strain symptoms are not treated or acted upon (Taylor, 1995).

The present research is based on an interactional perspective to stress, coping and health (Lazarus, 1991) and is concerned with exploring those coping processes and resources that may act as protective or "stress resistance factors" (i.e., factors which preserve the health and well-being) for individuals confronting organizational change and downsizing. Further, owing to the chronic and longstanding nature of organizational change and downsizing, the role of appraisals of features of the work setting that may be related to psychological strain (i.e., role ambiguity, conflict, overload) are considered for their interrelationships among coping processes/ resources and health outcomes. Figure 1 outlines the interactional model of stress, coping and health that guides this research.

Cognitive and Behavioural Coping Processes

A common thread among the interactive models of stress and coping is the belief that reactions and outcomes to stressful situations are modulated by psychological cognitive coping processes. Cognitive coping processes play a central role in the appraisal of stress, as well as in the behavioural and emotional regulation of stress (Miller, & Birnbaum, 1988, 1989; Miller, 1992; Moos & Schaefer, 1993).

Coping Styles: Monitoring and Blunting.

Two coping processes that have been shown to influence coping responses and interact with objective and perceptual control contingencies related to the stressor are: (1) processes aimed at maintaining or achieving personal control or mastery through

Figure 1. The Coping Process (adapted from Lazarus & Folkman, 1984, 1987; Kelloway & Barling, 1991; Taylor, 1995)

information seeking for instrumental reasons to guide coping efforts to address the stressor directly, and (2) processes aimed at emotional regulation of stress through cognitive distraction away from the source of the stress. Miller has labelled these coping styles monitoring and blunting (Miller & Birnbaum, 1988, 1989; Miller, 1992).

Past research in laboratory and medical settings suggests that the relative effectiveness of coping efforts in the face of both controllable and uncontrollable threat is influenced by these dispositionally based coping styles (i.e., monitoring and blunting), as well as the fit between one's characteristic coping style with the specific characteristics and nature of the stressor (Miller, 1979, 1987, 1990, 1992; Miller, Brody, & Summerton, 1988; Miller & Magan, 1983; Phipps & Zinn, 1986; Steptoe & O'Sullivan, 1986; Watkins, Weaver, & Odegaard, 1986). Dispositional differences in monitoring or blunting coping styles, as measured by the Miller Behavioural Style Scale (MBSS) in laboratory and medical setting studies (Miller & Birnbaum, 1988, 1989; Miller, 1992), suggest a monitoring approach produced adverse effects when attention to threat served to repeatedly re-expose individuals to threatening cues, resulting in increased felt anxiety and frustration. On the other hand, a monitoring strategy resulted in adaptive or beneficial outcomes when the threat was approached in a manner which enabled the individual to gather information to reduce uncertainty, allow processing and assimilation of the event leading to realistic resignation, or to use action directed towards instrumental solutions to reduce anxiety or stress (i.e., to gain information regarding appropriate control actions, resources and/or instruction on what to do about the problem or stressor being confronted) (Miller, 1990, 1992a,b, 1993; Miller, & Birnbaum, 1988, 1989).

Similarly, evidence suggests that a blunting strategy may be maladaptive when it functions to push a threat out of immediate awareness and thus hinder attempts to process the threat or prevent action to deal with the stressor. A blunting strategy appears to be beneficial to one's well-being and health in situations where attention directed away from the threat serves to reduce arousal, stress or anxiety, so that processing of the threat can be accomplished in a less overwhelming way (Miller, 1990, 1992a,b, 1993; Miller & Birnbaum, 1988, 1989).

Miller's research suggests that generally monitoring is more adaptive and beneficial than blunting when the threat is controllable (i.e., when instrumental action is possible or perceived to be possible). In contrast, when threat is of an uncontrollable nature (i.e., where no action is possible or where there is no possibility of altering the threat outcome), a blunting coping style, using cognitive distraction or directing attention away from the threat, has been found to be more adaptive (Miller, 1990, 1992). The specific mechanisms underlying these findings are outlined in Miller's Monitoring and Blunting Hypothesis (Miller, 1979, 1981, 1989) and relate directly to control contingencies related to the stressor.

While monitoring and blunting coping styles have been seen to have differential adaptational roles based on control contingencies related to the stressor, there are, according to Miller, two additional factors which may affect one's tendency to choose one or the other coping strategy. They are: (1) situational characteristics where the threat is of such severe intensity, high probability, or long duration that it precludes or interferes with successful attempts to blunt or distract and, (2) characteristic dispositional tendencies

towards either monitoring or blunting (Miller, 1990). Indeed, the Miller Behavioural Style Scale (MBSS) as a measure of monitoring and blunting has been shown to tap rather stable dispositional coping preferences in a number of experimental paradigms (Miller, 1990). For example, informational seeking responses were found to be reliably predicted by MBSS scores in a laboratory experiment where subjects were presented with threat of low-probability shocks and the choice of either listening for information concerning the shock or distraction by listening to music. Monitors tended almost exclusively to opt for the information-seeking strategy, whereas blunters tended to distract through music (Miller, 1987). In an experimental paradigm involving an ego-threatening task (i.e., a series of cognitive tests presumably indicating success in college) where subjects could either attend to a light signal indicating how they were performing or not, monitoring scores predicted a considerably higher rate of attention to the light signal as compared to blunters who rarely did so (i.e., an average response of 11.2 times focused towards the light for monitors compared to 1.6 times on average for blunters) (Miller, 1987).

Miller suggests that when individuals are forced by the situation into their dispositionally non-preferred mode of coping, they will experience more arousal and less adaptive outcomes than if the demands of the situation match their preferred coping style (Miller & Birnbaum, 1989; Miller, 1992). That is, in situations which provide informational cues concerning the stressor and allow for instrumental action, outcomes will be experienced as less arousing and more adaptive for high monitoring/low blunting styles than situations where information and action is less available. In contrast, high

blunting/ low monitoring in situations where information and action concerning the stressor is less available will produce less arousal and more adaptive outcomes than in situations where more information and action than is preferred characterizes the environment. Support for this "matching" hypothesis comes from a number of experimental and laboratory studies (Miller, Combs, & Kruss, 1993; Miller & Mangan, 1983; Sparks, 1989; Watkins et al., 1986). In studies that varied the amount and nature of information about medical diagnostic procedures which individuals were undergoing, monitors who were provided with voluminous sensory and procedural information concerning the diagnostic procedure fared better in terms of affective and physiological outcomes than monitors who received less detailed information. The reverse pattern of results was found for blunders: more adaptational outcomes were found for blunders who received less detailed information about the diagnostic procedure than blunders who received more information than they desired (Miller & Mangan, 1983; Watkins et al., 1986).

Because organizational downsizing in the federal government spans a three-year period, it can be conceptualized as a chronic and longstanding stressor. The threat of downsizing may vary along factors related to intensity (e.g., relative impacts of job loss, financial demands, personal identity), as well as differences related to the probability (or predictability) of job loss for any individual. For example, individuals who are certain of job loss (i.e., those that have been so notified), those who differ in their relative expectations of layoff (from low to high), and those who are relatively sure they will not be affected by downsizing, may differ in their experience of downsizing stress. These

factors may exert differential influences on adaptational outcomes for those employing either monitoring or blunting cognitive coping styles. Further, tenure in the federal government, eligibility for "buy out" and/or early retirement packages, and organizational variables, such as appraisals of the organizational work setting (e.g., differences in work demands) may also exert influences on coping processes and health outcomes.

To date, the research evidence pointing to the importance of monitoring and blunting cognitive coping styles in connection with different control contingencies and their health-related outcomes has been derived from experimental work done in laboratory or medical settings. Further, the stressful events investigated in these settings range from acute exposure to physical stressors (e.g., electric shock) to exposure to a variety of diagnostic protocols and short term responses to medical diagnoses. It is unclear whether or not the general patterns of predictions concerning the differential merit of either monitoring or blunting generalizes to the more chronic and longstanding threat of job insecurity and job loss linked to downsizing in the federal government. Any clear hypotheses concerning the influence of monitoring and blunting coping styles will be speculative owing to the absence of organizational research on these coping styles.

Similar coping constructs, however, that conceptually and empirically separate coping efforts oriented towards addressing the stressor directly (variously labelled problem-focused coping, engagement coping, approach coping, vigilant coping) from coping practices aimed at anxiety reduction through problem avoidance and emotional regulation (emotion-focused coping, disengagement coping, avoidant coping) have been

widely researched both within and outside organizational settings (Billings & Moos, 1981; Carver & Scheier, 1994; Carver, Scheier, & Weintraub, 1989; Catanzaro, Horaney, & Creasey, 1995; Folkman & Lazarus, 1980, 1985; Heppner, Cook, Wright, & Johnson, 1995; Holahan & Moos, 1987; Lazarus & Folkman, 1984; Long, 1990; Long, Kahn, & Schultz, 1992; Parkes, 1990; Taylor, 1995). There is general consensus in the coping literature that there is a clear distinction between coping directed towards (e.g., approach coping) and away from the stressor (e.g., avoidant coping) (Endler & Parker, 1990) and indeed this distinction has been found to be evident when several coping inventories were factor analyzed (Heppner, et al., 1994).

This literature will be considered from two vantage points for relevance in organizational investigations of coping outcomes: (1) research concerned with coping styles directed towards and away from a stressor, and (2) research focusing on problem- versus emotion-focused coping strategies.

Coping Styles Directed Towards and Away from a Stressor.

While the relative impacts and outcomes of monitoring and blunting cognitive coping styles have not been researched within the context of organizational settings, a number of coping styles characterized by the conceptual distinction between attention directed towards and away from the stressor have been investigated under a number of labels across a number of stressors (Roth & Cohen, 1986; Taylor, 1995).

The literature which deals with a related set of dispositionally based coping styles, vigilant versus avoidant coping, appears to be relevant to this discussion (Holahan & Moos, 1987; Roth & Cohen, 1986; Taylor, 1995). An avoidant coping style, somewhat

in line with a blunting style in that it is conceptually related to distraction or attention directed away from the stressor. has been shown to be associated with adaptive outcomes when the stressor is of relatively short duration (e.g., visiting the dentist), but to be linked to more negative outcomes when the threat is chronic or longstanding (e.g., dealing with chronic job stress) (Taylor, 1995). In contrast, a vigilant coping style (i.e., conceptually similar to a monitoring or attentional style) has been linked to stress reactions in shorter-term stressors but have been shown to be related to better adaptational outcomes over the course of longer term threats (Holahan & Moos, 1986, 1987; Suls & Fletcher, 1985; Taylor & Clarke, 1986; Taylor, 1995). This suggests that one factor not captured in Miller's model is critically important in understanding long-term coping outcomes. This factor relates to the temporal nature of the stressor (Roth & Cohen, 1986; Taylor, 1995).

Additional support for the temporal or time-related aspect of coping outcomes is found in Suls and Fletcher's (1985) meta-analysis of a set of short-term versus long-term coping studies. They found that (1) avoidant as compared to attentional coping was linked to more positive outcomes in short-term studies; (2) in longer-term studies and outcomes measured shortly after stressor onset, avoidance coping was found to be more efficacious than attentional coping; and (3) the superiority of attentional versus avoidant coping, however, was evident in longer-term studies where outcomes were measured at time periods as short as 2 weeks to as long as 5 years after the onset of the stressor (Suls & Fletcher, 1985). Suls and Fletcher (1985) argued that the evidence generally supports more efficacious outcomes for attentional over avoidance coping, but time is required for these effects to surface. Further, their results supported the utility of avoidance coping 3

to 7 days after the onset of a stressor but over the course of time, attentional coping is linked to more adaptational outcomes (Suls & Fletcher, 1985).

In other words, investigations of coping efficacy need to attend to the temporal aspects of the stressor. With respect to the chronic and longstanding nature of the specific stressor under study (downsizing spanning three years) and the fact that measurement for this study will occur at least one year after the onset of the threat of downsizing, would lead to the hypothesis that overall a monitoring or attentional coping style would be related to more adaptational health-related outcomes than a blunting or avoidant coping style. Indeed, this research would seem to suggest that, in the case of monitoring styles, information-seeking coping strategies may be initially associated with higher stress or anxiety reports, but over the course of downsizing linked to more adaptive functioning, especially if monitoring is associated with other coping resources, such as perceived organizational support and/or self-efficacy for instrumental action (Taylor, 1995). In contrast, a blunting style may relate to initial relief of anxiety and stress through avoidance or distraction, but may in the case of downsizing, be related to more negative outcomes when the avoidance strategies serve to interfere or prevent dealing with the realities of the threat of layoff.

While the temporal aspects of the stressor have been shown to be one aspect of coping efficacy, another possible explanation for the expected weak efficacy of avoidant coping concerns the contextual quality of the organizational setting and how stressor context might relate to Miller's monitoring and blunting matching hypothesis. For instance, multiple demands placed on individuals within the context of work may

preclude or interfere with successful blunting (or distraction) efforts or prevent the maintenance of a blunting style for the duration of a longer term or chronic stressor. If Miller's suggestion that the informational needs of monitors and blunterns influence differential stress reactions when these needs are not matched to the situation, blunterns in the face of organizational transition may be overwhelmed with unwelcome information by being unable to avoid organizational communiques, meetings with managers and work peers, and e-mail messages which routinely carry information concerning the status of the downsizing initiative. If this is the case, it would be in keeping with Miller's model to find that a high blunting/ low monitoring style would be linked to less adaptive outcomes for individuals facing organizational downsizing.

The next section considers the literature concerned with coping strategies directed towards and away from the stressor.

Coping Strategies Directed Towards and Away from a Stressor.

There has been a paucity of research concerned with the coping efforts of those facing organizational downsizing. One of the few studies available found coping through emotional discharge (i.e., sharing worries and anxieties with others) to buffer stress outcomes, whereas both cognitive avoidance and active attentional coping were found to increase stress reactions both prior to and six months following organizational downsizing (Ashford, 1988). A more recent study of layoff survivors (Armstrong-Stassen, 1994) found active coping to be associated with better organizational outcomes (i.e., higher organizational commitment, lower turnover intention and higher self-reported job performance) than escape or avoidant coping. Of note, there are no studies

of coping and health-related outcomes in the organizational downsizing literature.

Differential main and interactive effects related to differences in coping efforts have been noted in both community samples and in occupational settings. While the results of research on coping are by no means conclusive, problem-focused or active coping efforts directed towards instrumental action have been shown to buffer stress and adverse outcomes in high stress situations (Aldwin & Revenson, 1987; Mitchell et al. 1983; Parkes, 1990), high-control occupational situations (Bowman & Stern, 1995), and low stressor severity work conditions (Parasuraman & Hanson, 1987). Coping directed at emotional-regulation and away from the stressor (emotion-focused coping) has been shown to exert a constant or mediating role on outcomes in some situations, for example uncontrollable environmental threats, and in some occupational settings (where both positive and negative main-effect relationships with outcomes have been noted depending upon which emotion-focused strategies were employed) (Collins et al., 1983; Parkes, 1990).

Of note, Parkes' (1990) findings that higher suppression coping (somewhat similar to a blunting style) was associated with fewer health-related consequences, irrespective of level of perceived organizational stress, suggests that this form of coping may have some adaptive value in the organizational setting. This lends some support to arguments others have advanced concerning the value of suppression-like coping mechanisms (McCrae & Costa, 1986; Strentz & Auerbach, 1988; Vaillant, 1976). Her results also suggest that higher levels of direct or active coping (somewhat similar to monitoring) are related to clear buffering effects. That is, better health-related outcomes were found for high direct

coping irrespective of level of perceived work support or work demands such as time pressures and work overload, and more negative outcomes were evidenced for low direct coping in settings characterized by high work demand and low work-related support (Parkes, 1990). This suggests that while the use of suppression (or blunting) as a means of coping may be of value overall, more direct coping efforts are needed in the face of more challenging organizational stressors. At the same time, these results also suggest that the joint use of these different forms of coping may be more adaptive than strict reliance on one or the other (Parkes, 1990).

While it may seem at first intuitively appealing to consider conceptual overlaps between coping strategies and coping styles beyond noting that each can be classified as either those directed towards or away from the stressor, there are a number of problems with doing so that need to be addressed directly. Each of these problems will be discussed in turn below.

First, research concerned with emotion- and problem-focused coping explores strategies of coping in particular situations, whereas coping styles, such as monitoring and blunting, reflect a global dispositional, habitual style or preferred tendency to orient one way or another with respect to any stressor. A broad range of possible coping strategies, many of which may correspond to the problem- or emotion-focused coping strategies, are captured under the monitoring and blunting coping styles perspective. One important caveat, however, is outlined in Suls and Fletcher's (1985) meta-analysis of coping research where it is noted that, while problem-focused coping strategies by definition involve attentional efforts directed towards the stressor, many emotion-focused

coping strategies include both attention-like and avoidant strategies. This suggests that conventional conceptualizations of emotion-focused coping are confounded by both attentional and avoidant coping efforts and as such not a good proxy for avoidant coping styles (or blunting styles) (Suls & Fletcher, 1985).

Second, any attempts to integrate the organizational coping literature with the literature on monitoring and blunting coping styles must consider the status of the measurement tools in each area. The available measures of problem-focused and emotional-focused coping (e.g., Ways of Coping Scale, Folkman & Lazarus, 1980) have been widely criticized for conceptual heterogeneity in constructs, especially in the emotion-focused coping subscales (McCrae, 1982, 1984; Heppner et al., 1995). As well, criticisms concerning unclear and ambiguous items in the more popular coping scales have been common (Carver et al., 1989). Therefore, any ambiguity or confusion in the results of research concerned with problem-focused and emotion-focused coping may, in part, be a function of problems with their measurement.

In this study, interest in the informationally-based monitoring and blunting coping styles was guided, in part, by the measurement's (MBSS) conceptual clarity, demonstrated reliability, and discriminant validity (Miller et al., 1987; Miller, 1990). Further, in order to overcome some of the above-noted problems with the more general coping responses scales (e.g., Folkman & Lazarus, 1980) and to assess the coping efforts of individuals confronting the specific stressor under study, the Coping Response Measure (Ashford, 1988) was chosen for use in this study. This measure of coping responses was developed and tailor made for use in organizational settings confronting

transition and change (Ashford, 1988).

Coping Resources

It has been suggested that a number of coping resource factors may exert influence on adaptive and maladaptive coping outcomes. The term "coping resources" generally refers to stable personal and social-environmental factors which exert influence on individuals' attempts to manage stressful situations (Moos & Schaefer, 1993). The present study also considers the role of the following personal and organizational coping resources in coping and health-related outcomes.

In addition to coping styles (monitoring and blunting) (Miller, 1993) and coping responses specific to organizational change (Ashford, 1988), the personal and organizational coping resources or impediments investigated in this study are: (1) a pre-existing and enduring personality trait or cognitive bias such as Negative Affectivity (NA) or Neuroticism (Brief, Burke, George, Robinson & Webster, 1988; Chen & Spector, 1991; Costa & McRae, 1987; Levin & Stokes, 1989; McRae, 1990; Watson, 1988; Watson & Clarke, 1984; Watson & Pennebaker, 1989; Watson, Pennebaker & Folger, 1987); (2) perceived organizational control and efficacy beliefs (Antonovsky, 1987; Ashford, 1988; Ashford et al., 1989; Bandura, 1986; Bandura, Cioffi, Taylor, & Brouillard, 1988; Carver & Scheier, 1994; Friedman, 1991; Kobasa, 1979; Ouellette, 1993; Rosenbaum, 1990; Scheier & Carver, 1985, 1987); (3) perceived organizational support (POS) (Eisenberger et al., 1986, 1990; Jones et al., 1995); and (4) pro-active self-care practices or preventive health behaviours (Smith & Wallston, 1992; Steffy, Jones & Noe, 1990).

Negative Affectivity.

One route through which adaptive and maladaptive coping may occur is dispositional differences in negative affectivity (NA) or neuroticism. Negative affectivity has been defined as a stable and pervasive dispositional characteristic which reflects a general tendency to experience negative and aversive emotional states irrespective of the actual nature, severity or presence of a stressor (Watson & Clark, 1984; Watson et al., 1987). Specifically, "high NA individuals are more likely to report distress, discomfort, and dissatisfaction over time and regardless of the situation, even in the absence of any overt or objective source of stress" (Watson & Clark, 1984, p. 483). High NA individuals hold generalized feelings of distress and nervousness, tend to focus on the negative aspects of situations in general, dwell on mistakes, shortcomings and disappointments and report a broad range of somatic health complaints irrespective of objective health status. In contrast, low NA individuals tend to be more satisfied, calm, and more resilient to stressful situations (Costa & McCrae, 1987; Levin & Stokes, 1989; Watson & Clark, 1984; Watson & Pennebaker, 1989). Past research suggests that in high stress situations lower scores on trait negative affectivity indices have been linked to fewer health complaints, better health outcomes and the exercise of more adaptive coping strategies than for those who score high on negative affectivity (Miller, 1993; Parkes, 1990). Several researchers have also noted that negative affectivity or neuroticism was linked to more avoidant coping (Bolger, 1990; Costa & McCrae, 1990; Endler & Parker, 1990), whereas others (Miller, 1992, 1993; Miller et al., 1988) have noted no difference on trait measures of NA or neuroticism between those who endorse either monitoring or blunting

coping styles.

A growing body of research suggests that personality predispositions which differentially influence the experience of positive or negative affect or mood have links with well-being and health outcomes (Costa & McCrae, 1985, 1987, 1990; Hamid, 1990; Larsen & Ketelaar, 1991). These personality differences have been posited to rest in biological and neuronal systems which influence attentional-motivational stimulus-sensitivity systems resulting in vulnerability or susceptibility to experience specific affective states (Gray, 1971, 1987; Tellegen, 1985). High negative affectivity (or neuroticism) has been associated with a propensity to experience stronger negative than positive affect (Larsen & Ketelaar, 1991) and negative emotionality has been linked to a number of health consequences, such as coronary heart disease, asthma, ulcers, and headaches (Friedman, 1991; Friedman & Booth-Kewley, 1987), alcoholism, depression and suicidal behaviour (Taylor, 1995). This suggests that dispositional tendencies to experience negative mood may represent a risk factor (or vulnerability) for illness. It follows that individuals with the highest probability for maintaining or preserving psychological and physical well-being and health in the face of stressors, such as the threat of organizational downsizing, would be those with a lower predisposition for dispositional negative affect. This hypothesis, however, has not always been supported by past research.

Evidence emerging from reviews of the role of dispositional negative affectivity (or neuroticism) in health suggest that trait NA is typically not found to be correlated with objective or independent assessments of health status, immune functioning,

cardiovascular disease, cancer, or mortality,¹ but has been shown to be consistently associated with self-ratings of health symptoms (McCrae & Costa, 1987; Watson & Pennebaker, 1989). The findings of weak associations between NA and objective health markers suggest that interrelationships among self-reports of stress and health may be confounded by the measurement approach (i.e., self-report) (McCrae, 1990; Schaubroeck et al., 1992). This suggests that while chronic negative emotionality may be related to negative health outcomes, trait NA may not represent a true health risk factor but more likely represents a biasing influence in the measurement of stress-health relationships (Watson & Clark, 1984; Watson & Pennebaker, 1989).

The role of trait NA in self-reported stress-strain relationships concerned with organizational and health-related outcomes has been the subject of controversy and wide debate (Brief, Burke, George, Robinson, & Webster, 1988; Costa & McCrae, 1987; McCrae, 1990; Watson & Clark, 1984; Watson & Pennebaker, 1989; Watson, Pennebaker & Folger, 1987). The controversy centres on the recognition that without objective illness-health endpoints, and the widespread use of self-report health measures in stress research, and the propensity for those high in trait negative affectivity to report and experience a greater number of somatic symptoms irrespective of objective health status, the failure to control or account for the influence of trait NA may lead to stress-illness research that reflects a false or inflated impression of illness where none exists (Brief et al., 1988; Costa & McCrae, 1987; McCrae, 1990; Taylor, 1995; Watson & Clark, 1984; Watson & Pennebaker, 1989; Watson, Pennebaker & Folger, 1987). These authors argue that a systematic negative bias exists for those with negative affectivity

dispositions such that these individuals interpret stimuli more negatively in general, may inflate reports of stress-strain relationships, and seek more medical services than those low on NA. While it is unclear whether high NA individuals are at greater risk of illness, research to date indicates they are predisposed to experience and report greater stress, distress, physical symptoms and illness behaviours (Taylor, 1995).

Following the suggestions that trait NA inflates self-reported stressor-strain relationships and/or shares variance with different measures of stress and strain (Watson et al., 1987; Watson & Pennebaker, 1989), a number of recent empirical investigations have explored the extent to which partialing NA weakens correlations between stressor-strain relationships (Brief et al., 1988; Chen & Spector, 1991; Jex & Spector, 1992; Schaubroeck, Ganster, & Fox, 1992).

Of these studies, two have found NA to exert some influence in research concerned with stressor-strain relationships (Brief et al., 1988; Schaubroeck et al., 1992). For example, Brief and his colleagues (Brief et al., 1988) found NA to explain significant amounts of variance in stressor-strain relationships in their study of job stress among 497 managers and professionals in a large insurance company. Using latent-variable structural analyses, Schaubroeck et al., (1992) found that estimating the effects of NA on strain significantly weakened or reduced the effects of work stressors for 311 employees in fire and police departments. Their results suggest that variations in NA may introduce some spuriousness in research exploring relationships between stressors and strains (Schaubroeck et al., 1992).

Other studies (Chen & Spector, 1991; Jex & Spector, 1992) found NA to exert

less of an influence on stressor-strain relationships. Chen and Spector's (1991) research on chronic job stress and multiple outcomes (job satisfaction, anger, frustration, perceived stress, intention to quit, health symptoms, number of doctor visits and work absenteeism) on a sample of 400 employed workers in central Florida, found NA to account for a relatively small amount of the shared variance between chronic job strains and outcomes. Specifically, while their results reflected significant correlations between job stressors and affective and physical job strains, as well as significant correlations between NA and job stressors and strains, they found that partialing out NA reduced a relatively constant but small amount of shared variance (Chen & Spector, 1991). They argue that while their results generally suggest that some of the correlations among job stress and strain variables can be accounted for by trait NA, the bulk of their shared variance is unrelated to dispositional NA and related to other factors (Chen & Spector, 1991).

Of interest, Schaubroeck et al. (1992), using confirmatory factor analyses, found NA not to be a factor in common with measures of subjective strain or physical strain. These results call into question the role of trait NA as a general factor of somatopsychic distress as previously suggested (e.g., Watson & Pennebaker, 1989).

Overall, the research concerning the role of NA and stress-strain relationships suggests that the measurement of NA is an important, if not necessary, inclusion in self-reported stress research in order to rule out, control for, and/or examine more closely the potential biasing effects of this factor (Brief et al., 1988; Chen & Spector, 1991; Levin & Stokes, 1989; McCrae, 1990; Schaubroeck et al., 1992; Taylor, 1995; Watson, 1988; Watson & Clark, 1984; Watson & Pennebaker, 1989; Watson, Pennebaker & Folger,

1986). Two research approaches concerning the handling of the role of NA in stressor-strain relationships are suggested: (1) treating NA as a confounding factor in stress research and statistically controlling its influence, and (2) exploring the conceptual significance of NA in stress relationships (Barling & MacIntyre, 1993). Indeed, Barling and MacIntyre (1993) found negative mood to mediate relationships between job role stressors, such as role ambiguity and overload, and mental health (i.e., emotional exhaustion and minor psychiatric symptoms). That is, negative mood influenced mental health outcomes, irrespective of the level of appraised job role stress (i.e., ambiguity and overload). In practical terms, these findings suggest that pre-existing negative mood may influence health-related outcomes, irrespective of the levels of downsizing stress appraisal.

As the present study was most interested in the effects of downsizing stress on health and organizational outcomes, the former approach to handling NA was chosen (i.e., statistical control of NA). To date, no organizational downsizing research has included the measurement or control of Negative Affectivity (NA) in the study of stress-strain relationships. Research interest in the physical and psychological health outcomes of stress and coping in a downsizing environment, where objective measures of health markers were unavailable for this sample, mandated the use of self-report measures of stressors and health outcomes. As noted earlier, self-report measures of stress-strain have been shown to be sensitive to the influence of NA. Because of the possible confounding influence of dispositional NA in a study employing self-report measures of stress and health, a measure of trait Negative Affectivity (NA) was included in this research. For

the major analyses, the influence of trait NA was controlled (or considered before the influence of stress appraisal or coping variables). However, because low trait NA may also function as a possible moderator of stressor-strain relationships, supplementary analyses of its influence were possible.

Perceived Organizational Control and Efficacy Beliefs.

It has been noted that the objective character of the downsizing initiative fits the definition of an uncontrollable threat in that often individuals cannot exert any action to alter or influence the downsizing layoff decision. This threat, however, does not prevent some from holding perceptions of personal control or mastery over the outcomes of one's life or career and/or one's ability to exert some influence over how the threat of downsizing is personally managed. Indeed, personal perceptions of control, mastery or efficacy have long been recognized as an important and influential coping resource (Antonovsky, 1987; Bandura, 1986; Bandura, Cioffi, Taylor, & Brouillard, 1988; Carver & Scheier, 1994; Friedman, 1991; Kobasa, 1979; Ouellette, 1993; Rosenbaum, 1990; Scheier & Carver, 1985, 1987; Ziff, Conrad, & Lachman, 1995). Perceived self-efficacy is a cognitive mechanism through which perceptions of control affect stress reactions (Bandura, 1986) and relates to a belief in one's abilities to mobilize the motivation, resources and instrumental actions needed to meet situational demands (Bandura et al., 1988). When self-efficacy to deal with a particular stressor is present, it may reduce threat appraisal and stress reactions regardless of the objective characteristics of the stressful situation. Feelings of higher self-efficacy have been associated with more active coping and persistent attempts to manage threatening situations (Moos & Billings, 1982)

and positive perceptions concerning the possible benefits arising out of a stressful situation (i.e., viewing the situation as an opportunity versus a threat) (Jones, 1983, 1986). Indeed, Taylor suggests that self-generated feelings of control/efficacy (or illusory control) have been found to be associated with positive psychological health outcomes for individuals confronting chronic disorders such as cancer and health threats (Taylor, 1983; Taylor & Brown, 1988; Taylor, Helgeson, Reed, & Skokan, 1991; Taylor, Lichtman, & Wood, 1984). Perceptions of control and self-efficacy have been shown to influence the use of and adaptive nature of a variety of health practices (e.g., exercise programs, altering intake of alcohol and tobacco, healthy life style behaviours) (Taylor, 1995; Ziff et al., 1995).

At the same time, research suggests that control contingencies such as lower perceived personal control and predictability in one's life (or job) contribute to heightened feelings of insecurity (Sutton & Kahn, 1986). Low personal control and uncertainty in both job and life contexts have been linked to an increased incidence of negative psychological and physical health-related consequences across a number of literatures (Alfredsson & Theorell, 1983; Alfredsson, Karasek, & Theorell, 1982; Baum, Fleming, & Reddy, 1986; Gunnar, 1986, 1989; Karasek, Baker, Marxer, Ahlbom, & Theorell, 1981; Kiecot-Glaser & Glaser, 1990; Perrewe & Ganster, 1989; Rodin, 1986; Rodin, Timko, & Harris, 1985; Seligman, 1975; Skinner, 1995; Spector, 1986, 1987; Taylor & Brown, 1988; Tetrick & LaRocco, 1987).

With respect to this study, the above discussion suggests that any informed attempt to unravel the relative influence of the uncontrollable threat of downsizing and its

possible relationships and interactions on coping and health outcomes would consider both the objective presence of uncontrollable threat in the stressor (e.g., layoff) and individuals' perceptions and appraisals of personal control and self-efficacy. It is hypothesized that more adaptive health outcomes will be associated with higher perceptions of organizational control and/or self-efficacy concerning the management of the downsizing threat. It is further hypothesized that a monitoring coping style accompanied by perceptions of higher self-efficacy and perceived personal control will be associated with more adaptive health outcomes as compared to those employing a monitoring coping style with lower efficacy and control perceptions.

Perceived Organizational Support.

Organizational research on job stress and work-related social support has largely (if not exclusively) focused on informal social networks, such as support from co-workers and supervisors in the measurement of social support. Recently, others have argued that perceptions concerning more formal support-related organizational structures may be a better measure of support in the workplace and a better mediator and moderator of job stress and affective outcomes (Eisenberger, et al., 1986, 1990; Jones et al., 1995). The construct, perceived organizational support (POS), is concerned with employees' perceptions that the organization supports the contributions of employees, cares and values them, and would provide help and support when problems emerge. As such, POS is a global measure of perceived support in the workplace, and as Jones et al. (1995) argue also a measure of organizational culture.

There is considerable variability, however, in the definition of organizational

culture (DeFleur, Kearney & Plax, 1993; Jewell & Siegal, 1990; Littlejohn, 1996).

Owing to the multiplicity of possible factors that may influence perceptions of organizational culture and the inherent difficulties in operationally defining these influences (e.g., legends, stories, symbols), the "formal study of organizational culture is in its infancy" (Jewell & Siegal, 1990, p. 357). Organizational culture, however, is generally thought to reflect, at a macro level, formal and informal properties of the organizational system (e.g., hierarchical structure, mission, goals, shared meanings, sources of power, influence and support), and at a micro-level, symbolic perceptions and interactions among organizational membership (e.g., perceived facts, practices, metaphors, stories, legends, rituals) that serve to guide patterns of collective action, as well as reflect aspects of the organization's social environment (DeFleur, Kearney & Plax, 1993; Jewell & Siegal, 1990; Kozlowski et al., 1993; Littlejohn, 1996).

Kozlowski et al. (1993) note that global perceptions of support or culture are important properties of organizations that exert influential effects on employees' perceptions at all stages of downsizing, and conversely that downsizing is "a highly salient symbolic event" that influences perceptions of organizational culture (Kozlowski et al., 1993, p. 308). While there is no research to date exploring the influence of perceived organizational support or culture on the well-being or health of individuals confronting downsizing, research on job stress using causal modelling has shown that, like social support from informal work networks, perceived organizational support mediates outcomes related to job stress (Jones et al., 1995). Indeed, Jones found POS to be a much more powerful construct than informal social support at work in explaining

variability in work stress and affective outcomes. Measures of social support accounted for 2% to 5% of variance in work stress compared to 50% for the POS measure (Jones et al., 1995).

Others have noted that individuals in more supportive work environments are more likely to use active coping strategies, seek information and support (Moos & Schaefer, 1993). Parkes (1986) found that student nurses used more active, approach coping in high stress situations that were accompanied by a supportive working framework. In a later study, Parkes (1990) found that irrespective of level of work support, higher levels of direct or active coping were associated with better health scores, whereas lower levels of direct coping were found to be associated with better health outcomes for those experiencing high work support than those employing the same suppression-type strategies in lower work support situations.

In the present study, there is interest in the adaptive function of perceived organizational support (POS) for individuals confronting the threat of downsizing. It is hypothesized that higher levels of POS will be associated with lower levels of appraised downsizing stress and more adaptational health outcomes. Conversely, lower levels of POS will be linked to more negative health outcomes and lower levels of organizational affective well-being or satisfaction.

Self-Care Behaviours & Health Practices.

Another route through which adaptive coping occurs in the face of downsizing stress may be the practice of positive health behaviours (i.e., a collection of personal behaviours aimed at preventing physical and psychological strain) (Kasl & Cobb, 1966).

Such practices may include: weight and nutrition management, avoidance of harmful substances (i.e., tobacco), relaxation training, and physical exercise (Steffy, Jones & Noe, 1990).

In a study of stress in three industries, Steffy et al. (1990) suggest that health behaviours can be grouped into two factors: (1) personal health habits, such as restricted intake of substances such as alcohol, tobacco and caffeine, and (2) life-style habits aimed at improving health, such as exercise, nutrition, adequate sleep, use of relaxation strategies, and regular medical check-ups. Their results indicated that life-style habits, more than personal health habits, exerted a direct, mediating role on work stress and strain outcomes. Positive health habits were found to be associated with better psychological outcomes (Steffy et al., 1990). These researchers, however, found no support for the buffering hypothesis (i.e., positive health behaviours and lifestyle moderate strain in high stress situations) (Steffy et al., 1990). Others have found support for direct effects on health for perceived control and healthy lifestyle behaviours (Ziff, Conrad, & Lachman, 1995). That is, research suggests that those who hold higher perceptions of personal control engage in healthier lifestyle behaviours and in turn are more healthy (Ziff et al., 1995). Still further, Hamid (1990) reports more health promotion behaviours for individuals higher in optimism than pessimism.

Buffering effects for one health habit, exercise, have been noted by Kobasa, Maddi and Puccetti (1982). They found that both regular exercise and high hardiness (a construct tapping commitment, control and challenge in life) exerted independent buffering effects on illness outcomes among male managers (Kobasa et al., 1982). They

posit that exercise serves a health protection role (or acts as a resistance resource) in higher stress situations and, when accompanied by other coping resources, such as dispositional hardiness, greater health gains in the face of stress are more likely (Kobasa et al., 1982).

Other lines of evidence suggest that negative health habits, such as increased smoking and drinking, have been found to be outcomes to a number of occupational stressors, such as working long hours and high job demands (Repetti, 1993). Further, those who spend long hours at work have also been found to do less physical exercise (Repetti, 1993).

These findings suggest that health behaviours may be conceptually linked in complex ways to both the prediction of and response to different stressors. For the purposes of this research, health behaviours are included as a coping resource variable, which when present, may mediate relationships between downsizing stress and health-related outcomes. The above-noted research suggests that this is most likely when perceived control and/or cognitive processes supporting more positive than negative affect are also present.

Appraisals of Downsizing Stress

Job Insecurity.

While organizational research concerned with the effects of downsizing is only beginning to attend to the construct of job insecurity, the research which has focused on uncertainty concerning future employment suggests that it is an important part of the appraisal of downsizing stress (Ashford, Lee, & Bobko, 1989; Brockner, 1988; Brockner

et al., 1992; Greenhalgh & Rosenblatt, 1984; Hartley, Jacobson, Klandermans, & van Vuuren, 1991). At present the construct of job insecurity is thought to consist of two components: (1) perceived threat through increased likelihood of job loss or layoff, and (2) perceived powerlessness to alter or resist the threat of job loss (Greenhalgh & Rosenblatt, 1984).

Hartley et al. (1991) argue that part of the reason for limited empirical interest in job insecurity aspects of downsizing stress rests in the sensitive and emotional nature of its measurement in organizations undergoing massive change. Organizations, they argue, may be hesitant to allow for the measurement of job insecurity issues for fear that its measurement may generate further anxiety (Hartley et al., 1991). This under-researching of job insecurity is in sharp contrast to the long honoured study of job security in traditional organizational psychology dating back to the Great Depression in the 1930s (Hartley et al., 1991). Research to date that focuses on job insecurity in downsizing samples suggests that it is one important component of appraised job stress (see Brockner, 1988 for a review), and job insecurity has been linked to reductions in organizational commitment, lower feelings of organizational trust, reduced job satisfaction, and increased intentions to leave the organization (Ashford et al., 1989).

The present research is concerned with the relative effects of coping on the well-being and health of individuals experiencing organizational downsizing in the Canadian federal government. Job insecurity or heightened uncertainty concerning job continuation is explored as one source of work stress in a setting undergoing major restructuring and downsizing. It was previously noted that the threat of job insecurity

arising from the chronic and longstanding nature of the downsizing initiative under study may vary along factors related to intensity and probability (or predictability) of job loss for any individual. In this research it is expected that individuals who are certain of job loss and those who vary along a continuum from low to high probability of job loss, will also vary in their experience of job insecurity. That is, stress appraisals are expected to be higher for those with greater probabilities of layoff than for those with lower expectations. This is in keeping with the Lazarus and Folkman (1984) tradition in stress and coping research that suggests that subjective appraisal of the probability of an event's occurrence, such as uncertainty about job retention (or "event uncertainty"), has an equal or greater potential for generating anxiety and tension than the event of job loss itself. This has been supported by research from other contexts (Lazarus & Folkman, 1984) wherein uncertainty concerning important life situations has been found to be consistently associated with anxiety and stress reaction (Hartley et al., 1991). Differences in adaptational outcomes, however, have also been found to be linked to individual variability in coping processes and resources (Lazarus & Folkman, 1987).

The Lazarus model of coping suggests that the likelihood and predictability of job loss relates to primary appraisal of threat (i.e., what is at stake). The perception of powerlessness to counteract the threat relates to secondary appraisal (i.e., what can and cannot be done to forestall the threat) (Lazarus & Folkman, 1984, 1987).

The present research, therefore, was designed to extend the investigation of downsizing stress to include the measurement of the construct job insecurity, as well as a broader range of coping processes and resources: coping style, situational efficacy beliefs

or perceived control, perceived organizational support, and health behaviours while controlling for the influence of a cognitive bias known as trait negative affectivity. At the same time, and in keeping with the theoretical model under study, the influence of appraisals of the work setting in which downsizing is occurring will also be considered for reciprocal influences on stress appraisals and coping outcomes.

Job Role Stress: Role Ambiguity, Conflict, and Overload.

Other sources of occupational stress, which have been shown to be separate from job insecurity (Ashford et al., 1989; Brockner, 1988) but which may contribute towards (or compound) cumulative stress reactions for those confronting downsizing threat, concern appraisals of the work environment itself. That is, job stress in the face of downsizing may be due to additional factors above and beyond job insecurity (Brockner, 1988) and exert an influence on stress and health outcomes through either indirect means or reciprocal relationships with a host of person-environmental influences (Lazarus & Folkman, 1984, 1987). For example, the threat of downsizing may impact the individual through work changes, disruptions, and adaptations to the work environment; differences in job-related factors such as role conflict, overload, and ambiguity; and job satisfaction and organizational commitment (Ashford et al., 1989; Hartley et al., 1991). In addition to appraisals of job insecurity, this research also considers three appraised work role or environmental stressors: role conflict, role ambiguity, and role overload.

More than two decades of research indicates well established associations between job role stress appraisals (e.g., role conflict, ambiguity, and overload) and job-related well-being and affective health outcomes (Barling & MacIntyre, 1993; Barnett,

Davidson, & Marshall, 1991; Bhalla, 1989; Bhalla, Jones, & Flynn, 1991, 1992; Bhar & Duxbury, 1994; Higgins, Duxbury, & Lee, 1992; Ganster & Schaubroeck, 1991; Jones et al., 1995; Kelloway & Barling, 1991; Marshall & Barnett, 1993). Role conflict, role ambiguity and role overload are frequently measured factors in organizational studies of chronic job strain (Abdel-Halim, 1978; Beehr, Walsh & Taber, 1976; Karasek, 1979; Rizzo, House & Lirtzman, 1970), comprise component parts of more comprehensive measures of occupational environments (e.g., the Occupational Environment Scales, Osipow & Spokane, 1983; The Occupational Stress Indicator (OSI), Cooper, Sloan & Williams, 1988), as well as important elements of job stress models (Karasek, 1979, 1989; Katz & Kahn, 1978; Kelloway & Barling, 1991; LaRocco, House & French, 1980; Netemeyer, Johnston & Burton, 1990). Further, investigations of psychological and organizational health owing to chronic job stress have been conducted on federal public service samples using role stress appraisal variables (e.g., Barling & MacIntyre, 1993; Bhalla, 1989; Bhalla et al., 1991, 1992; Bhar & Duxbury, 1994; Jones et al., 1995). For example, role overload and characteristics of the work environment have been shown to be reliably associated with physical strain (Bhalla et al., 1992) and emotional exhaustion (Barling & MacIntyre, 1993). Role ambiguity and conflict have been shown to be related to negative job satisfaction and lower affective commitment to the organization (Jones et al., 1995) and negative mood (Barling & MacIntyre, 1993). While the previously noted research reports the outcomes of job role stress in public service samples, Kelloway and Barling (1991), using a hospital-based sample, found higher job role stress in the form of role ambiguity and overload to be associated with lower job satisfaction, job-related

emotional exhaustion and depersonalization (i.e., context-specific mental health). In turn, negative context-specific mental well-being (i.e., job-related well-being) was found to mediate relationships between both job role stressors and global aspects of negative mental health (i.e., context-free mental health) (Kelloway & Barling, 1991).

As outlined in Jackson & Schuller's (1985) meta-analysis of the literature dealing with job stress and health, job role stress variables, such as role conflict and ambiguity correlate .30 on average with job-related affective measures of distress. There is a growing literature on job stress that has found that elements and appraisals of work demands, such as role conflict, ambiguity, overload, low decision latitude, and monotony in the workplace, are associated with illness outcomes, such as coronary heart disease (Alfredsson, Karasek, & Theorell, 1982; Cooper & Marshall, 1976; Kahn, 1974; Karasek & Theorell, 1990; Karasek, Baker, Marxer, Ahlborn, & Theorell, 1981; Theorell, 1993), and a broad range of somatic symptoms (Cooper, Kirkcaldy, & Brown, 1994; Parkes, 1982). Ganster and Schaubroeck (1991) reviewed the literature on job stress and concluded that the relationships among job role stress appraisals and physical health had not been adequately and consistently demonstrated in the research findings. While relationships among job stress and physical health may not be clear, they remain relatively unmeasured and unstudied in downsizing samples.

Role conflict is defined as perceptions of conflicting messages concerning job requirements (Katz & Kahn, 1978) or perceptions of incompatible or incongruent demands to carry out the job (Abdel-Halim, 1978). Organizations undergoing change and downsizing may pose a number of diverse opportunities for the experience of role

conflict. For example, employees may be chronically placed in situations where they receive incongruent demands for service coming from different levels of the organization, are placed in situations that conflict with their personal values and integrity, and/ or are confronted by work demands that challenge work-nonwork expectations.

Role ambiguity has been defined as vague, inadequate or restrictive access to relevant information concerning the specific job position or classification an individual is in (Abdel-Halim, 1978; Katz & Kahn, 1978). Thus role ambiguity generally reflects a level of uncertainty concerning the appropriate behaviour or performance standards for a particular job or job function (Brockner et al., 1988) and is not an unexpected or surprising consequence of downsizing and restructuring in environments wherein the rate and likelihood of job change and reorganization may interfere with the provision and availability of clear communications concerning the redefinition of roles, responsibilities and job expectations.

Role overload concerns perceptions of lack of available resources (e.g., time) to meet the demands, requirements and expectations of the job (Abdel-Halim, 1978). This type of job demand is likely to be highly represented in downsizing organizations where cutbacks in human and fiscal resources challenge the employee to provide the same level of service.

Inclusion of these variables in this research is in keeping with the theoretical model under study (Lazarus & Folkman, 1984, 1987). That is, primary and secondary appraisals of threat and coping are influenced by a broad range of person-environmental resources and impediments including a number of work-related stressors which comprise

the downsizing environment (see Figure 1, p. 13). Further justification for inclusion of this set of work-related stressors in this study comes from findings of a recent survey study of survivors' perceptions of their work environment following downsizing (Tombaugh & White, 1990) wherein significant differences between perceptions of the pre- and post-downsizing work environments were found. Tombaugh and White (1990) found downsizing environments to be characterized by significant increases in perceptions of role conflict, role ambiguity, and role overload, accompanied by decreases in the incidence of positive feedback systems. Lower job satisfaction and increased intention to leave the organization were found to be linked to downsizing survivors' reports of increased role ambiguity, role conflict, and lower levels of positive feedback in the work setting (Tombaugh & White, 1990). These results suggest that overall levels of job stress may be higher in downsizing organizations. Higher job stress due to changes in the demands and satisfactions with the work setting may interact with and/or contribute cumulatively to the stressfulness of organizational downsizing. If this is the case, downsizing environments accompanied by higher job demands may pose particular threats to the well-being and health of some employees.

This line of reasoning also recognizes the findings of a larger body of organizational research which suggests that job strain reflected in variables measuring job role ambiguity, conflict and overload are of importance because of their links with organizational outcomes such as job satisfaction, organizational commitment, as well as physical and psychological health outcomes. For example, outcomes related to mental strain, anxiety, physiological arousal and physical illness (e.g., cardiovascular disease)

have been associated with chronic job demand characteristics (i.e., role conflict, role ambiguity, role overload, and lack of decision-making latitude at work) (Cooper, Kirkcaldy & Brown, 1994; Karasek, 1979; Karasek et al., 1981; Perrewe & Ganster, 1989; Spector, 1986, 1987), as well as with direct and indirect reciprocal relationships with job satisfaction (Cooper et al., 1994).

In the expansive and growing literature on occupational stress, however, consistent patterns of results and relationships among job demands, job strain measures, organizational factors and health-related outcomes have not always been found and continue to be the subject of widespread debate and speculation (for a review see, Ganster & Schaubroeck, 1991).

Similarly, research has not been consistent in demonstrating a job insecurity link with health-related outcomes. For example, Ashford et al. (1989) found that while perceptions of job insecurity were heavily influenced by organizational changes, role ambiguity and external locus of control (consistent with elements influencing perceptions of lack of predictability and control), job insecurity was found to be unrelated to outcomes of somatic health in a sample of employees from a variety of American organizations². Job insecurity, however, was found to be linked to reductions in organizational commitment, lower feelings of organizational trust, reduced job satisfaction, and increased intentions to leave the organization (Ashford et al., 1989). The Ashford et al. (1989) findings suggest that job insecurity, while influenced by control contingencies related to organizational change, may be only one aspect of the experience of job stress. Other factors which influence job stress are work-related factors, such as

role ambiguity, conflict and overload. In keeping with the theoretical model under study (Lazarus & Folkman, 1984, 1987), current conceptualizations of job stress also support the role of additional individual differences variables which may serve to mediate or moderate outcomes of job stress during downsizing (Brockner, 1988; Brockner, Weisenfeld, Reed, Grover, & Martin, 1993; Cooper et al., 1994).

Demographic Factors

A number of demographic factors (e.g., age, gender, marital status, and job category) have been associated with the experience and reporting of stress (i.e., both work- and nonwork-related stress), coping and health-related differences. The literature in general, however, is not consistent in its findings concerning the role of these factors in stress reaction (Barnett, Davidson, & Marshall, 1991; Baruch, Biener, & Barnett, 1987; Baum & Grunberg, 1991; Billings & Moos, 1982; Clarke, 1983; Costa & McCrae, 1985; Duxbury & Higgins, 1991; Higgins, Duxbury & Irving, 1992; Kline & Goldenberg, 1994; Leana & Feldman, 1991; Phillips & Little, 1993; Phillips, Little, & Goodine, 1995; Wiersma, 1990) and coping (Hamilton & Fagot, 1988; Shin, Rosario, March, & Chestnut, 1984; Parks, 1990; Taylor, 1995).

For example, increasing age has been associated with a higher incidence of illness for both genders, however, while wide variations are noted, men and women differ in the types of illnesses they develop (Baum & Grunberg, 1991). While both genders have been noted to have high mortality rates from cardiovascular diseases, cerebrovascular diseases, and cancer, men are at higher risk for mortality from chronic obstructive pulmonary disease and accidents, whereas women are at greater risk for autoimmune diseases,

pneumonia, and influenza (Verbrugge, 1985).

It has been noted that gender differences in health may be stress related (Baum & Grunberg, 1991). For example, research on stress frequently notes that females often report significantly higher levels of psychological distress than males (e.g., Costa & McCrae, 1985). This finding, however, is not consistently found (e.g., Billings & Moos, 1982; Leana & Feldman, 1991). Billings & Moos (1982) found a greater work stress impact for men than women. Work stress was attenuated (or made worse) by the presence of social resources for men but not for women (Billings & Moos, 1984). Leana & Feldman (1991) found no significant differences between men and women in psychological and behavioural distress symptomatology in response to job loss when job category (or position in the organization) was controlled (i.e., professional, technical and clerical workers). While this suggests a structural or occupational positional effect independent of gender, it is noted that women often occupy lower positions in the organizational hierarchy than men (Clarke, 1982; Wiersma, 1990). Weirisma (1990) suggests that, while females have been found to experience more work role conflict than men, job level rather than job role conflict explained these gender differences. Barnett and her colleagues found job role quality to be significantly negatively associated with distress equally for men and women (Barnett, Marshall, Raudenbush & Brennan, 1993).

Research often finds significant differences in stress reactions as a function of marital status (i.e., being single versus being married has been found to be associated with higher stress and lower satisfaction for both gender groups) (Barnett et al., 1991; Leana & Feldman, 1991). Others, however, have noted that being married and having a

number of children substantially increases the risk of coronary heart disease for female clerical workers (Haynes & Feinleib, 1982 cited in Barnett et al., 1991).

There is a growing body of evidence which suggests that stress linked to conflicts between work and family responsibilities for individuals occupying "multiple roles" (e.g., mother, wife, and employee) are most common when one role interferes with the successful management of the other, for example, when work problems or overtime interfere with family life (e.g., Cook & Rousseau, 1984; Duxbury & Higgins, 1991; Higgins, Duxbury & Irving, 1992; Wiersma, 1990). Employed women are assumed to be at greater risk of work-home role conflict because they may hold more multiple roles through their responsibilities for child care, household management, as well as managing their employment. Ottaway and Bhatnagar (1988) found female managers to experience and report more work-home conflict than male managers. In contrast, Duxbury and Higgins (1991), using a sample of managers and professionals with children, and spouses likewise employed, found men experienced greater work-family conflict than women. They found no gender differences, however, between work involvement and work conflict, nor between home involvement and family conflict (Duxbury & Higgins, 1991). Women appeared to be more adept at balancing work-home demands than men, and men were more likely than women to allow work conflict to spill over into the home (Duxbury & Higgins, 1991). Others assume that multiple roles (i.e., spouse, parent, employee) exert beneficial roles on life and stress management by providing variety, interest, purpose, and money (Baruch et al., 1987). Research in support of this assumption suggests higher psychological well-being and life satisfaction for married women with

children who are employed than for women holding fewer roles (Thoits, 1983; Stewart & Salt, 1981; Verbrugge, 1986).

Demographic factors (e.g., gender) may also influence coping with stressors. Some researchers have found women to be more likely than men to cope by talking to friends and seeking social support whereas men have been found to be more likely to actively cope by addressing their stressor directly (e.g., engage in job searches) (Leana & Feldman, 1991; Parkes, 1990). Of note, differences in types of coping strategies employed by men and women have not been consistently found. For example, a number of studies suggest that different types of coping are employed equally by men and women, i.e., active instrumental or problem-focused coping and emotional-focused and/or social seeking coping (e.g., Hamilton & Fagot, 1988; Shin, Rosario, March, & Chestnut, 1984).

While a comprehensive review of the many possible ways demographic variables may influence stress, coping and health-related outcomes is beyond this discussion, research to date suggests that differential coping responses and appraisals to stressors, environmental experiences, and/or biological factors, and gender may contribute in complex ways to variation in health and well-being (Baum & Grunberg, 1991). The available research, however, is unclear with respect to what the influence of demographic variables may have on stress appraisal, coping and health outcomes in the face of organizational downsizing. As a means of controlling the possible influence of demographic variables in the present study, they were statistically controlled (i.e., considered first in the regression analyses before the stress appraisal and coping

variables), however their associations with the range of factors under study were explored by correlational analyses.

Summary

The present research sought to extend the investigation of the effects of downsizing on psychological well-being and physical health to include a broader range of theoretically important individual difference coping variables than are typically measured in studies of job stress. Specifically, this research was framed within the theoretical model of coping and health proposed by Lazarus and Folkman (1984, 1987) and was concerned with exploring relationships among monitoring and blunting coping styles, and coping resources such as situational efficacy beliefs or perceived control, perceived organizational support, and pro-active self-care practices or health behaviours, for their mediating and moderating roles in psychological and physical health outcomes for individuals confronting organizational downsizing. In addition, the role of these coping processes and resources were explored for their influence on organizational outcomes related to well-being (i.e., job satisfaction, affective commitment).

Coping styles, self-efficacy beliefs or perceived control, perceived organizational support and health behaviours influence coping and health outcomes. Evidence suggests that in the case of long term, chronic stressors coping directed towards the stressor is associated with more adaptive health outcomes than coping directed away from the stressor, especially if it is associated with higher perceived organizational support and/or self-efficacy for instrumental action. Control contingencies such as predictability and perceived control, as well as the duration of the stressor, have been shown to influence

the adaptive and maladaptive nature of coping styles. Negative situational characteristics (e.g., higher probability of layoff, lack of access to early retirement or "buyout" packages), perceptions of powerlessness, high job demands, and high importance of work may increase the probability of threat appraisals by those confronting downsizing.

An important aspect of this research is that, as well as the conventional control variables used in organizational stress research (i.e., age, gender, organizational tenure and job classification), control for trait negative affectivity (NA), a well known negative cognitive bias factor, was applied to the research design concerned with coping outcomes for those confronting the threat of downsizing.

Hypotheses

The following research hypotheses were tested:

1. Negative Affectivity (NA) will be associated with negative organizational and health-related outcomes.
2. The downsizing stress appraisal variables (i.e., job insecurity and role stress) will contribute significant gains in the amount of the variance explained in organizational and health-related outcomes after NA and the set of demographic variables have been controlled. Higher levels of job insecurity and/ or higher job role stress appraisal (i.e., role conflict, ambiguity and overload) will be associated with more negative organizational and health-related consequences for individuals in a downsizing environment.
3. The organizational coping variables (i.e., perceived organizational control, and perceived organizational support (POS)) will add further incremental gains in explained

variance for organizational and health outcomes.

4. The personal coping variables (i.e., health behaviours, and the set of coping responses) will also contribute to explained variance for organizational and health outcomes. Positive health behaviours, and coping characterized by information seeking, cognitive redefinition, emotional discharge, and self-efficacy will be associated with more adaptational outcomes.

Hypotheses concerning specific main and interaction effects among the coping resource variables and downsizing stress are as follows:

5. (a) Perceived control or self-efficacy will interact with stress appraisal to influence the adaptive nature of health-related outcomes.
- (b) Higher POS will have a direct effect on outcomes irrespective of level of downsizing stress but lower POS when associated with higher levels of stress will be associated with more negative health-related outcomes.
- (c) A higher positive health behaviour score will be associated with better health-related outcomes irrespective of downsizing stress levels.

It has been noted that any clear hypotheses concerning the role of monitoring and blunting coping styles will be speculative owing to the absence of previous research on these coping styles in organizational samples. However, the following tentative hypotheses are made in light of previous research:

6. (a) Coping directed towards the stressor (i.e., a monitoring style or attentional coping) will be associated with more adaptational organizational and health outcomes than a blunting coping style.

- (b) Appraisals of downsizing stress will interact with coping styles to influence the adaptive and maladaptive nature of health-related outcomes. A higher monitoring coping style score will be associated with more adaptive health-related outcomes at higher levels of downsizing stress than a lower monitoring (or blunting) style.
- (c) A higher monitoring coping style score will be associated with more adaptive health-related outcomes at higher levels of perceived control/efficacy than a lower monitoring (or blunting) style.
- (d) A high monitoring coping style will be associated with more adaptive health-related outcomes at higher levels of perceived organizational support (POS) than a lower monitoring or (blunting) style.
- (e) A higher monitoring coping style will be associated with more adaptive health-related outcomes when accompanied by a greater number of positive health behaviours than a lower monitoring (or blunting) style.

Method

Participants

A sample from a large government department designated as "most affected" by the current federal public service downsizing was obtained through formal departmental approval. Six hundred and thirty eight research questionnaires were distributed to employees in two ways: (1) 176 through group testing of volunteers at scheduled times by the researcher in a large board room provided by the government department, and (2) 462 via random desk drops of questionnaires to employees through departmental co-ordination. Of the questionnaires distributed, 61% (108/176) and 26.6% (123/462) were returned from group testing and the random desk drop respectively. The large difference in return rates are assumed to be related to the following: (1) those who physically attend group testing and/or pick up a questionnaire at a designated location have, through self-selection, a greater likelihood of completing and returning the questionnaire, and (2) during the time period of the random desk drop (November 1996 through January 1997), four other research studies were also under way in the department, which may have negatively influenced the response rate.³

The overall response rate for returned questionnaires was 36.2% (i.e., 231/638) and is similar to those reported by a number of researchers studying job stress in both downsizing and non-downsizing organizational samples (i.e., response rates from 30 to 40 percent) (Brockner et al., 1992, 1993; Davy et al., 1991; Donaldson, 1996; Kelloway & Barling, 1991). Response rates of fifty percent or better, however, have also been

noted (Armstrong-Stassen, 1994, 1997; Ashford, 1988; Ganster, Fusilier & Mayes, 1986).

Of the 231 returned questionnaires, seven were not used for the following reasons:

(1) three participants indicated they were from departments other than the one under study, and because there was no reliable way to assess whether these employees were actually from the target department but on assignment elsewhere, they were dropped; (2) it was discovered that two participants had completed the questionnaire twice so their second response was not used; and (3) two questionnaires were returned with a sizable amount of data missing. The result was a usable sample of 224 cases. The sample of 224 cases comprises employees both directly affected (i.e., notified of imminent layoff or "surplus" status) (17.4%) and those who were not so notified at the time of testing (81.7%).

Bilingual questionnaires were provided and 71.4% were completed in English and 28.6% in French. Fifty-four percent of the respondents indicated English as their first language, 44.1% French, and the remainder specified languages other than English or French. Gender distribution was 33.5% male and 66.5% female. Ages ranged from 22 to 63 years with a mean age of 42 and standard deviation of 8.3 years. Educational status for the sample was as follows: 2.7% indicated less than a grade 12 education, 20.5% completed high school, 15 % had some college or university, 12.3% completed college, 33.2% completed undergraduate university, and 16.1% had post graduate degrees. The breakdown for marital status was 56.8% married, 19.4% single, 15.3% separated, divorced or widowed, and 8.1% "other". Of this last group, most specified a homosexual relationship as their explanation for indicating "other" status.

Length of service in the federal government ranged from six months to 32 years, with a mean tenure of 15 years and standard deviation of 8 years. On average, participants in this study had been in their present position 4.7 years. A comparison of the sample demographics to those of the overall departmental population is outlined in the Results section (see Tables 1 & 2).

Procedure

Pre-Testing the Questionnaire.

Prior to any data collection, the readability and timing requirements of the English version of the questionnaire were pre-tested on a sample of seven public servants from departments other than the one used for this study. This sample included three females in clerical positions with a grade 12 or less education, three female officer-level employees with either a Bachelor of Arts or Masters degree in Psychology or Social Work, and one male executive with a graduate degree in Political Science. Only minor problems with the wording of the questionnaire were noted and were corrected. For example, one participant suggested that the question concerning "affected" status also include "surplus" status to reduce any ambiguity. This was noted and changed to read, "Have you been identified as an "affected" or "surplus" individual by the government downsizing exercise?".

The time taken to complete the questionnaire ranged from 65 to 109 minutes, with a mean time of 77.7 minutes for the three clerks ($n=3$) and a mean of 75.4 minutes for the total group ($n=7$). The pre-testing suggested that the questionnaire could be completed comfortably in less than two hours and had no notable problems with readability. Of

note, however, participants attending the room testing phase of data collection, on average, completed the questionnaire in one hour.

French Translation of the Questionnaire.

Two professors at Carleton University's French Department were contracted to translate the questionnaire into French. Both had experience in and were familiar with the federal government's quality standards for translation into French. The French translation was then reviewed and validated (i.e., translated back into English) by an independent translator (i.e., a multi-lingual Francophone with twenty years experience in translation into French and English). This latter step in the translation process follows the recommendations of Hulin (1987) who suggests that "close correspondence between the original source language and the back-translated source language version is required before reliance can be placed on the results based on translated scales" (p. 118), as well as that translations and back translations be conducted by independent translators (i.e., working separately) who are fluently bilingual and familiar with both cultural contexts.

Comments from six participants during the room testing phase of the study who consented to pre-test the bilingual version of the study questionnaire, confirmed that the English and French versions of the questionnaire were equivalent (i.e., said the same thing) and that the translation had been well done. Empirical validations of the quality of the translation are outlined in the Results section.

Efforts to Solicit Participation.

Efforts to solicit participation in the group testing phase of this study included the following activities. (1) Letters introducing the study and the researcher and welcoming

participation were sent to employees. The letters indicated that the study had been endorsed and approved by the government department but was an external research project being conducted as part of the researcher's PhD program at Carleton University. Employees were notified that their participation was voluntary, no deception was involved in the study and that their responses would be strictly confidential.

(2) Similar letters were sent to managers with the additional request that they encourage their staff to participate by allowing time during working hours for employees to complete the questionnaire. The letter also invited managers to complete a questionnaire.

(3) E-mail messages were sent to employees by the designated departmental co-ordinator introducing the study and the researcher and giving the times and locations for completing the questionnaire. The letters to managers and employees and the e-mail messages were bilingual (English and French). All of the above means of soliciting participation provided the project telephone number where employees could contact the researcher directly, as well as the names and telephone numbers of departmental agents coordinating this study (see Appendix A).

Approval for a random desk drop approach to data collection was facilitated by the following activities: (1) Letters from both the ADM Human Resources and this researcher introducing the study and requesting branch support to meet target numbers for participation were sent to all ADMs in the department (see Appendix B). (2) This was followed up by telephone and personal contact with each senior official as a further means of seeking approval and cooperation for random desk drops of the questionnaires. Approval from eight of the eleven branches was achieved for the time period November

1996 to January 1997. The three branches that were unable to participate declined for the following reasons: two were heavily involved in a large in-house project and organizational restructuring during this period but were interested in participation at a latter time, and the remaining branch was heavily involved in instituting new legislation which demanded intense time expenditures on the part of their employees. As a result, the senior official deemed that employees would be "too busy" to participate during this time frame.

The eight participating branches agreed to randomly distribute the study questionnaires to employees. Sealed study questionnaire packages were delivered to each branch representative who agreed to distribute them to roughly one in five employees. Notices by e-mail were also sent to employees in each branch from each ADM introducing the study and giving notice that a random desk drop would occur. Roughly two weeks following the distribution of the questionnaire packages another e-mail was sent to employees as a reminder to send their responses to the researcher.

Each questionnaire package contained a letter from the researcher, a separate consent form and envelope for the consent form, the questionnaire with briefing instructions and the study phone number where participants could reach the researcher if necessary for further information. Also included was a debriefing letter from the researcher and a pre-addressed stamped envelope to use for sending the completed questionnaire directly to this researcher at Carleton University.

Participation for both data collection methods involved filling in a bilingual questionnaire in the language of their choice (English or French) which took

approximately 2 hours to complete.

Measures¹

The following measures were included in the research questionnaire package (see Appendices I & J for the English and French versions).

Coping Style Measure: Miller's Behavioural Style Scale (MBSS).

The MBSS is a measure of monitoring and blunting cognitive coping styles (Miller, 1979, 1987, 1988). The MBSS has been shown to have good reliability, internal consistency, and discriminative and predictive validity (Miller, 1987). Past research using the MBSS has found the measure to not overlap with the constructs of anxiety, depression, Type-A or internal locus of control (Miller & Birnbaum, 1989) and to be separate from the construct of repression-sensitization (Steptoe, 1986). Cronbach's alpha coefficients reported for the monitoring subscale have been found to range from .75 to .79; and for the blunting subscale from .67 to .69 (Miller, 1979, 1987, 1988).

The MBSS is a measure which uses individuals' self-reported activity across 4 imagined stress-evoking naturalistic scenarios (i.e., visiting dentist, hostage taking, impending layoff, and an airplane problem). For each imagined scenario respondents are instructed to indicate all of the statements that describe what they would do to cope in each situation. Each scenario includes 8 -items. Half of the items relate to actions aimed at monitoring (e.g., for the airplane problem scenario: "I would listen carefully to the engines for unusual noises and would watch the crew to see if their behaviour was out of the ordinary", or "I would read and reread the safety instruction booklet"). The other half of the items relate to blunting (e.g., "I would watch the inflight movie even if I had seen it

before").

Scoring of the MBSS results in three measures: (1) the monitoring measure, (2) the blunting measure, and (3) monitor/blunter measure. The monitoring measure is the sum of all items on the monitoring subscale with scores above the median designated high monitoring and below the median, low monitoring. The blunting measure is the sum of all items on the blunting subscale with scores above the median indicating high blunting and below the median, low blunting. The monitor/blunter measure is the difference score between all the items endorsing blunting and all the items endorsing monitoring. The difference score then indicates either monitoring or blunting as the overall coping style (Miller, 1992).

Coping Response Measure.

The Ashford (1988) coping response measure specifically designed for use in organizations facing transition and change was included in this research. Items from this measure were adapted by altering the wording of items where the word "restructuring" was used to read "restructuring/downsizing". Subscales include: (1) Cognitive redefinition (i.e., one item reading "I try to look at the restructuring/ downsizing as an opportunity" which asked the respondent to indicate on a 5-point Likert scale the extent to he/she agrees or disagrees with the statement (i.e., 1 = strongly agree and 5 = strongly disagree); (2) Cognitive avoidance (3 items, $\alpha = .65$)(e.g., "I focus on my current job and try to think about the restructuring/ downsizing as little as possible"); (3) Information seeking (2 items, $\alpha = .63$)(e.g., "I seek out information from various sources about the restructuring/ downsizing and its implications"); (4) Emotional discharge (3

items. $\alpha = .73$) (e.g., "I share my worries with close coworkers"). Subscales 2 through 4 are answered on a 5-point Likert format indicating the extent to which each item is very characteristic (1) to very uncharacteristic (5) of the respondent's behaviour (Ashford, 1988).

Coping Resources Measures.

Self-efficacy was measured by the use of Ashford's (1988) Change-specific efficacy scale that is a 4-item measure using a 5-point Likert format ranging from agree (1) to disagree (5) that the item describes the respondent's own behaviour. An example of an item under this scale is "Wherever the restructuring/downsizing takes me, I'm sure I can handle it.". Coefficient alpha = .67 (Ashford, 1988).

Perceived Organizational Control (PC) was assessed using the-3 item Powerlessness Scale developed by Ashford, Lee and Bobko (1989). A sample item is "I understand this organization well enough to be able to control things that affect me.". Items are answered on a 4-point scale in terms of how much the respondent agrees or disagrees with the statement: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. An alpha coefficient of .83 has been reported for this measure (Ashford et al., 1989). While previous research has included the Powerless Scale as part of the measurement of job insecurity (Ashford et al., 1989), this research considered the influence of perceived control and perceived predictability (certainty) of job loss as two separate constructs.

Perceived Organizational Support (POS) was measured using 8 items of the Survey of Perceived Organizational Support (Eisenberger et al., 1986, 1990). Examples of items include: "Help is available from my organization when I have a problem." and "The organization really cares about my well-being.". Items are answered using a 7-point scale indicating degree of agreement or disagreement for each statement. The 7-point scale is as follows: 1 = strongly disagree, 2 = disagree, 3 = mildly disagree, 4 = neither agree or disagree, 5 = mildly agree, 6 = agree, 7 = strongly agree. Cronbach's alphas for this measure range from .93 to .97 (Eisenberger et al., 1986, 1990). This measure of POS has shown adequate to good reliability across a number of organizational samples (Eisenberger et al., 1986, 1990; Jones et al., 1995).

The Health Behaviours Checklist (HBC) (Vickers, Conway, & Hervig, 1990) was used to assess self-care behaviours and health behaviours. This measure is a 40-item checklist, scored on a Likert scale ranging from 0 to 4, which asks respondents to indicate how often each item describes their typical behaviour. The scale is as follows: 0 = never/not typical, 1 = rarely, 2 = sometimes, 3 = often, 4 = almost always/ extremely typical. This measure includes two distinct subscales: (1) wellness behaviours or preventive habits (e.g., "I exercise to stay healthy."), and (2) risk-taking habits (e.g., "I cross busy streets in the middle of the block."). Alpha coefficients for the wellness behaviour subscale have been found to range from .74 to .82; and for the risk-taking subscales to range from .44 to .75 (Vickers et al., 1990). Owing to the relatively weak reliability index for the risk-taking subscale, as well as the fact that the construct of risk is not a part of the theoretical framework of this research, this sub-scale was not used.

Appraisal Variables.

Job Insecurity was measured using the 3-item scale developed by Caplan, Cobb, French, Van Harrison and Pinneau (1975) and used by Davy, Kinicki and Scheck (1991). Alpha co-efficients for this measure have been reported to be .82 (Greenhalgh, 1982). The items tap aspects of perceived certainty with respect to future career and job security assessed on a 5-point Likert format (1= extremely uncertain to 5= extremely certain). In addition, items dealing with specific aspects of perceived probability of layoff adapted from Brockner, Grover, Reed and Dewitt (1992) and Davy et al. (1991) were included. For example, respondents indicate on a 10-point Likert scale the "likelihood that you will be facing a job loss arising from downsizing over the next three years" (1= not at all likely to 10= very likely/ almost certainly). In order to identify those individuals who have been notified that they will be downsized from those who have not been so notified and whether or not alternative financial resources exist, the following questions were also asked: "Have you been identified as an "affected" or "surplus" individual by the government downsizing exercise?" (yes or no); "Are you planning to take advantage of the ERI (Early Retirement Incentive) or EDI (Early Departure Incentive)?" (yes, no, or uncertain, and if yes, which one).

Job Role Stress Appraisal Variables: Role Conflict, Ambiguity & Overload were measured using three measures: role conflict (5 items), role ambiguity (5 items), and role overload (5 items) (Abdel-Halim, 1978, adapted from Beehr, Walsh & Taber, 1976; Rizzo, House & Lirtzman, 1970). Each of these scales are answered on a 7-point Likert scale where respondents are asked to indicate the extent to which each item describes

their present work situation (1 = very false to 7 = very true). Examples of items include: "I receive incompatible requests from two or more people." (role conflict); "I have clear, planned goals and objectives for my job." (reverse score - role ambiguity); "It seems like I have too much work for one person to do." (role overload). Reported alpha coefficients are .74 for role conflict, .72 for role ambiguity, and .80 for role overload scales (Latack, 1986). Further, recent research using structural equation modelling supports the reliability and validity of the above-noted scales (Kelloway & Barling, 1990; Nettemeyer, Johnston, & Burton, 1990).

Perceived Stress Scale (PSS) is a widely used 10-item measure of perceived global life stress which asks individuals to indicate how often they have felt or thought a certain way during the last month. Statements are presented in Likert form (i.e., 0= never, 1= almost never, 2= sometimes, 3= fairly often, 4= very often). Cronbach's alpha coefficient of .78 has been reported on this measure (Cohen, Kamarck, & Mermelstein, 1983; Cohen & Williamson, 1988). Examples of items include: "In the last month, how often have you felt nervous and 'stressed'?" and, "In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?". The items were designed to tap how unpredictable, uncontrollable, and overloaded individuals feel in their lives (Cohen et al., 1988). This measure appears to tap similar constructs to those included for work-related stress appraisals and was felt to be redundant with appraisals of role ambiguity, conflict and overload. Further, the emotional nature of the wording of items in the PSS suggests that this measure may also be highly correlated with measures of negative affectivity. While the statistical character of this measure in relationship with

the other study measures is of some interest and included here for purposes outside this immediate research project, use of the PSS was not a planned part of this research.

Organizational Outcomes.

Job Satisfaction was assessed using the Job Design Inventory (JDI Scale) developed by Smith, Kendall, & Hulin. (1969). The JDI asks respondents to indicate what their job is like most of the time by answering "yes", "no", or "undecided" next to each of 17 adjectives or descriptors aimed at tapping aspects of intrinsic job satisfaction. Examples of the adjectives include: "Pleasant", "Ideal", "Enjoyable", "Poor". This measure has been shown to have good test-retest reliability, as well as discriminant and convergent validity (Smith et al., 1969). An alpha coefficient of .79 has been reported by Kelloway and Barling (1991) for the JDI. While a large number of job satisfaction measures have been criticized for their high intercorrelations with other self-report measures of psychological adjustment and negative affect (NA) (Watson et al., 1987), the JDI using a "yes", "no", "undecided" format and descriptors of the job, has been shown to be less affected by NA (Schaubroeck et al., 1992) and less likely to be subject to common method variance in research based solely on self-report (Spector, 1987). Indeed, the JDI is not considered to have common method variance as a problem when used in research based solely on self-report as the use of an adjective checklist approach is considered to be a different method (Spector, 1987). This is empirically supported by multitrait-multimethod analyses of a number of job satisfaction measures (Spector, 1987). Spector (1987) notes that while method variance is frequently cited as a criticism of research using affective and perceptual measures in organizational studies of stress, it may be

more of a mythical problem than fact. He suggests that measures that are well developed, well validated, and which have well known psychometric properties are least likely to be influenced by common method variance issues and he goes on to provide empirical support for his claims (Spector, 1987). Further, Spector (1987) argues that the JDI "is considered the most carefully developed satisfaction instrument available" (p.439).

Organizational Commitment was measured using two separate subscales: affective commitment and continuance commitment developed by Meyer and Allen (1984). The Affective Commitment Scale (ACS) is an 8-item scale, using a 7-point Likert response format (strongly disagree to strongly agree) with items which assess organizational commitment from the perspective of affective attachment, identification with, and involvement in the work organization. Examples of items from the ACS subscale include: "I feel a strong sense of belonging to my organization.", "I would be happy to spend the rest of my career with this organization.". The Continuance Commitment Scale (CCS) is an 8-item scale, using a 7-point Likert response format (strongly disagree to strongly agree) with items which assess organizational commitment from the perspective of appraised costs involved in leaving the organization (e.g., investment, scarcity of alternatives) (Meyer & Allen, 1984). Examples of items from the CCS subscale include: "I feel I have too few options to consider leaving this organization.", "Too much of my life would be disrupted if I decided I wanted to leave my organization now.". Meyer and Allen (1984) report an alpha coefficient of .87 for the affective commitment scale (ACS) and others have reported alpha's ranging from .81 to .89 (Eisenberger et al., 1990). The continuance commitment scale (CCS) has a reported

alpha coefficient of .77 and has been found to be uncorrelated with ACS ($r=.01$) (Meyer & Allen, 1984). Brooke, Russell and Price (1988) have reported good discriminant validity between measures of job satisfaction and organizational commitment, which supports the notion that they tap separate empirical constructs. For the purposes of the present research, the subscale dealing with affective commitment was used to assess one aspect of organizational affective well-being.

Health Outcomes.

STAI State Anxiety Inventory (S-Anxiety) (Form Y) is a frequently used, 20 item measure of anxiety in response to stressful situations and is separate from trait anxiety measures that assess more stable individual differences in tendencies to experience anxiety irrespective of the stressfulness of the situation (Spielberger, 1983). This measure assesses respondent's feelings of apprehension, tension, worry and nervousness at the time of testing (i.e., respondents are instructed to indicate how they are feeling "at present"). The 20 items are answered on a 4 point Likert scale as follows: 1= not at all, 2= somewhat, 3= moderately so, 4= very much so. Reported alpha coefficients for this measure on a number of diverse samples range from .86 to .95 (Spielberger, 1983). In this research the State Anxiety measure was used as a measure of psychological and emotional distress⁵.

Cohen & Hoberman Inventory of Physical Symptoms (CHIPS) is a 33 item inventory of physical health symptoms developed to exclude items tapping psychological complaints (Cohen & Hoberman, 1983). Respondents are asked to indicate on a 5 point Likert scale "how much that problem has bothered you or distressed you during the last

month including today". The scale ranges 0 = not bothered to 4 = extreme bother.

Examples of items include: "back pain", "constipation", "acid stomach or indigestion",

"shortness of breath when not exercising or working hard", "nosebleed". The CHIPS has

a reported Cronbach's Alpha of .88 and has been found to be significantly correlated with the use of Health Services five weeks after scale completion (Cohen & Hoberman, 1983).

Control Measures.

STAI Trait Anxiety Inventory (T-Anxiety) (Form Y) is a frequently used, 20 item measure of trait anxiety or stable personality tendencies to experience anxiety irrespective of the stressfulness of the situation (Spielberger, 1983). This measure asks respondents to indicate the extent to which each item describes how they "generally or typically feel" on the 4 point Likert scale as follows: 1= not at all, 2= somewhat, 3= moderately so, 4= very much so. Examples of items include: "I feel nervous and restless", "I feel satisfied with myself", "I take disappointments so keenly that I can't put them out of my mind".

Reported alpha coefficients for this measure across a number of diverse samples range from .89 to .96 with a median alpha coefficient of .90 (Spielberger, 1983). In this research the STAI T- Anxiety measure was used as a personality measure of Trait Negative Affectivity (NA) (Watson & Clark, 1984). It has been widely suggested that Trait NA influences not only the general experience of stress and distress but also acts as a pervasive negative influence in self-reporting tendencies on paper and pencil assessments of any form (Watson & Clark, 1984; Watson & Pennebaker, 1989). High scorers on Trait NA are typically described as anxious, pessimistic and moody who have corresponding high scores on measures of psychological and physical distress. For the

purposes of this research. Trait NA was used as a control variable in order to assess its possible confounding influences on health-related outcomes.

Demographics Variables (i.e., age, gender, tenure and job classification) were also included as control variables. The federal government downsizing exercise is not necessarily conducted according to seniority and it is unclear what the influence of these demographic variables may have on stress appraisal, coping and health outcomes in the face of this type of organizational stressor, so demographic variables were controlled (i.e., considered in the analyses first before the stress appraisal and coping variables) (for demographic detail, see Appendix H.)

Results

The results of this study will be presented in the following sections. First, the section titled Preliminary Analyses covers the following: descriptive statistics of population and sample demographics, the analysis of method of sampling, reliability analyses of measures used in this study, Factor Analysis results, Correlational Analysis, and Canonical Correlation of job stress, stressors and coping variables, and an analysis of pre-existing health problems in the sample. The second section deals with the major analyses, and is divided into sections which deal with outlier analyses and the series of Hierarchical Multiple Regression Analyses conducted.

Preliminary Analyses

Descriptive Statistics of Population and Sample Demographics.

The demographics of the population (i.e., the government department from which the study sample was drawn) and the obtained study sample are presented in Tables 1 and 2. As indicated in Table 1 there was a slightly larger representation of full-time employees (indeterminate) in the study sample as compared to the population (i.e., 81.3% versus 75.6%) and a smaller representation of term employees (17.6% in the sample compared to 26.2% in the population). The representation of indeterminate employees identified as having 'affected or surplus status' owing to downsizing in the study sample, however, matched that of the population (i.e., 17.4 % in the sample as compared to 17.8% in the population). Gender representation in the study sample was 66.5% female and 33.5% male and roughly comparable to the population statistics (58.6% female and

41.4% male). The percent breakdown by age category was roughly similar between the population and the obtained sample. Table 2 indicates job category and level of the population and sample. Noted here is a slightly larger representation of middle managers (EX minus 1 and 2) in the obtained sample as compared to that of the overall population and a smaller representation in the Administrative Support category made up of clerks and secretaries. This finding may reflect the high profile this study received in the department and the support it received from the management and executive community. The percentages between the sample and population are comparable in the remaining job categories.

Analysis of Method of Sampling.

Two approaches to data collection were used in this study. One utilized a room testing approach where participants were informed of room locations and testing times and solicited by e-mail. The other approach was achieved through random desk drops of questionnaires coordinated by senior management in eight branches of the department. In order to test whether or not there were differences in the demographic characteristics of those who participated as a function of type of data collection method a MANOVA with discriminant function analysis was conducted. Demographic predictors were age, gender, tenure in the government, job category, education, marital status and first language. Groups were method of data collection: room testing or random desk drop.

Of the original 224 cases, 6 were rejected from the analysis because of missing data. Missing data appeared to be randomly scattered throughout the groups and predictors. Tests of the assumptions of linearity, normality, multicollinearity or

Table 1**Demographics of Population and Sample**

	NHQ Population ^a (n=4126)		Study Sample (n=224)	
Employment Status				
Indeterminate	75.6%	(n=3036)	81.3%	(n=182)
Term	26.2%	(n=1080)	17.6%	(n=39)
Other	0.02%	(n=1)	0.4%	(n=1)
Missing/Unknown	0.22%	(n=9)	0.9%	(n=2)
Surplus Status				
% of Indeterminate employees				
Surplus in 1995	12.7%	(n=385)		
Surplus in 1996	4.9%	(n=148)		
Surplus in Jan-Feb 1997	0.3%	(n=8)		
Total Surplus	17.8%	(n=541)	17.4%	(n=39)
Gender				
Male	41.4%	(n=1708)	33.5%	(n=75)
Female	58.6%	(n=2418)	66.5%	(n=149)
Age				
< 20 years	0.56%	(n=23)	0.0%	(n=0)
>= 20 & <30 years	13.52%	(n=558)	10.0%	(n=22)
>= 30 & < 40 years	28.60%	(n=1180)	26.7%	(n=59)
>= 40 & <50 years	42.46%	(n=1753)	46.6%	(n=103)
>= 50 & < 60 years	13.48%	(n=556)	16.3%	(n=36)
>= 60 & < 65 years	1.09%	(n=45)	0.5%	(n=1)
>= 65 years	0.27%	(n=11)	0.0%	(n=0)
			Missing	
			1.3%	(n=3)

Note: ^a NHQ refers to National Headquarters in Ottawa of the government department studied.

Table 2**Job Category and Level of Population and Sample**

	NHQ Population ^a (n=4126)	Study Sample (n=224)
EXs (Senior Management)	2.7%	2.2% (n=5)
EX minus 1	3.6%	9.4% (n=21)
EX minus 2	8.2%	16.5% (n=37)
Officers below EX minus 2	47.0%	46.9% (n=105)
Admin & Foreign Service	--	4.2% (n=99)
Scientific & Professional	--	2.7% (n=6)
Admin Support (Clerks & Secretaries)	35.7%	21.4% (n=48)
Technical	2.2%	2.2% (n=5)
Operational	0.3%	0.0% (n=0)
Missing	0.3%	1.3% (n=3)
TOTAL	100.0%	100.0%

Note: ^aNHQ refers to National Headquarters in Ottawa of the government department studied.

singularity, and homogeneity of variance-covariance matrices suggested no threat to the analysis.

Multivariate tests of significance resulted in a significant $F(8, 209) = 2.756$, $p < .006$. Univariate F-tests with (1, 216 d/f) indicate that age, gender, employment status, tenure, education, marital status and first language were non-significantly related to method of testing. However, job category was found to be significantly related to method of testing, $F(1, 216) = 16.15$, $p < .0001$ (see Table 3). A cross tabulation of job category by method of testing (see Table 4) suggests that the room testing attracted twice as many officer level participants than the random drop, whereas the random desk drop resulted in more representation from the Scientific/ Professional and middle to senior management groups. This finding was expected as the random desk drop approach was used to allow those who were unable or unwilling to attend room testing to participate and to ensure that an adequate cross section of the department's demographics were reflected in the obtained study sample. The results of the descriptive statistics comparing the population with the study sample, as well as the tests for differences in method of testing suggest that this was adequately achieved.

Table 3**MANOVA/ Discriminant Analysis of Sample Demographics by Method of Testing****Multivariate Tests of Significance**

Test	Value	Exact χ^2	DF	Error DF	Sig. of χ^2
Pillais	.095	2.756	8	209	.006
Hotellings	.105	2.756	8	209	.006
Wilks	.905	2.756	8	209	.006
Roys	.095				

Multivariate Effect Size and Observed Power at .05 Level

	Effect Size	Power
All Tests	.095	.93

Univariate χ^2 -tests with (1, 216) d/f.

Variable	Wilks' Lambda	χ^2	Sig. of χ^2
AGE	.999	.037	.848
GENDER	.999	.003	.960
ESTATUS	.997	.672	.413
TENURE	.996	.937	.334
JOBCATR	.930	16.149	.0001*
EDUC	.999	.202	.653
MARITAL	.999	.212	.641
LANG	.999	.168	.682

Table 4**Cross Tabulation of Job Category (JOBCATR) by METHOD**

Job Category JOBCATR	<u>Data Collection Method</u>		
	Room Test (n)	Desk Drop (n)	Total (n)
7 = EXs (Sr Mgrs)	1	4	5
6 = EX minus 1	4	17	21
5 = EX minus 2	11	26	37
4 = Scientific & Professional	1	5	6
3 = Officer/ AFS	61	38	99
2 = Technical	2	3	5
1 = Admin Support	27	21	48
Total (n)	107	114	221

Number of Missing Cases = 3

Reliability Analyses.

Alpha coefficients were calculated for all measures used that included more than one item. While each of the measures used have reported and published reliability statistics, alpha coefficients for each measure were further explored in this study for two reasons: (1) to provide a validation of each measure on the obtained study sample, and (2) to assess the reliability and validity of translated versions of each measure (i.e., English or French version) (Hulin, 1987). A full outline of the alpha coefficients for each measure and their subscales for the total sample, as well as for the English and French version subsamples can be found in Appendix K.

For the most part, the obtained study alpha coefficients were comparable to or better than previously published statistics and the results were roughly consistent among English and French versions of each measure, suggesting that the English to French translation was successfully achieved (Vallerand, 1989).

Notable exceptions were reflected in weaker alpha statistics for the monitoring and blunting coping style measures. For instance, the overall alpha coefficient for the monitoring scale was found to be .61 in this study (n=224) as compared to alphas ranging from .75 to .79 as published by Miller (1979, 1987, 1988). Inspection and exploration of item-total statistics for the monitoring measure suggested that no further gains in alpha were possible with any inter-scale item deletion and this was consistent for the overall sample (n=224), the English version subsample (n=160) and the French version subsample (n=64). For the blunting coping style measure, the original overall alpha was found to be .58 and increased to .61 with one inter-scale item deletion (i.e., removal of

item. "I would take a tranquilizer or have a drink before going." from the dentist visiting scenario). This suggests that the content of this item may be tapping a different construct or have a different meaning to the respondent than that of the remaining items aimed at assessing coping through distraction from a stressor (i.e., blunting style) (Hulin, 1987). Examples of some remaining blunting items for the dentist scenario noted above include: "I would try to think about pleasant memories" and "I would do mental puzzles in my mind". Inspection of item-total statistics for this subscale suggested no further gains in alpha were possible via item deletion.

The overall obtained alpha of .61 for the blunting measure in this study was found to be lower than the published ranges of .67 to .69 (Miller, 1979, 1987, 1988). Further, the alphas for the French versions of the monitoring and blunting scales were lower (i.e., .57 and .53 respectively) suggesting that differences as a function of language and/or item meaning may exist between the English and French versions of this measure (Hulin, 1987; Vallerand, 1989). Given that this study represents the first attempt to assess monitoring and blunting coping styles in an organizational sample, the resulting lower alphas may suggest that the reliability and validity of these scales may be less stable in samples outside those for which the scales were developed (i.e., English medical setting samples). These findings are disappointing given the theoretical interest this study held in monitoring and blunting coping styles.

Exploratory Factor Analysis and Data Reduction.

Exploratory factor analysis (FA) using principal components analysis (PCA) with varimax rotation were performed on 46 subscale scores and items from the research questionnaire for the total sample of 224 participants. This analysis was conducted to explore which sets of theoretically relevant variables could be combined, collapsed or dropped to obtain a better ratio of variables to sample size, and to investigate patterns of correlations among variables.

Sixteen factors were extracted using 208 cases after listwise deletion of cases due to missing data. As indicated in Table 5, while the sixteen factors extracted cumulatively account for 71.6 percent of the explained variance, eigenvalues for the first six factors are larger than two and together account for 42.6% of explained variance. After the ninth factor, changes in successive eigenvalues are small and the content themes or underlying processes within the remaining factors are less clear or determined solely by one or two variables. This suggests the likelihood of between six to nine stable and independent factors (Tabachnick & Fidell, 1995). Appendix L provides the results for the Rotated Factor Matrix with orthogonal varimax rotation. As indicated here, most factors are distinguishable and well defined by the variables that load on them (i.e., they have a simple structure with high factor loadings of variables within the factor and low factor loadings with the other factors). Exceptions included variables suspected of complexity (i.e., suspected of having influence in more than one factor): role ambiguity (AMBIGTOT) was found to have a moderately high factor loading with both factor 2 and 8 (-.50 and .50 respectively); similarly employment status (ESTATUS) related to both

Table 5
Factor Analysis: Final Statistics

Variable	Communality	Factor	Proposed Factor Label	Eigenvalue	Pct of Var	Cum Pct
AMBIGTOT	.68	1	<i>Distress</i>	5.45	11.8	11.8
BLUNTING	.77	2	<i>Org. Affect</i>	3.61	7.8	19.7
CARESUPP	.61	3	<i>Prev. Health Behaviour</i>	3.26	7.1	26.8
CCOMITOT	.67	4	<i>Org. Descriptors</i>	2.89	6.3	33.1
CHIPSTOT	.64	5	<i>Job Insecurity</i>	2.32	5.0	38.1
COGAVOID	.74	6	<i>Cognitive Attitude</i>	2.08	4.5	42.6
CONFLTOT	.71	7	<i>Coping Style</i>	1.86	4.0	46.7
EDUC	.72	8	<i>Job Role Stress</i>	1.64	3.6	50.2
EFFICATO	.64	9	<i>Coping Responses</i>	1.47	3.2	53.4
EMOTDISC	.63	10	<i>Work Time</i>	1.41	3.1	56.5
ERIEDI	.68	11	<i>Language</i>	1.33	2.9	59.4
ESTATUS	.70	12	<i>Educ & Substance Risk</i>	1.29	2.8	62.2
GENDER	.61	13	<i>Gender/Retirement Opt</i>	1.14	2.5	64.7
HBACCTOT	.79	14	<i>Support Others</i>	1.09	2.4	67.1
HBRISK1	.75	15	<i>Health Behav. Risk</i>	1.07	2.3	69.4
HBRISK2R	.61	16	<i>Marital/Home</i>	1.00	2.2	71.6
HBWELLTO	.83					
INFOSEEK	.70					
ECONOMIC	.67					
JINSECTO	.76					
JOBCATR	.78					
JOBSATOT	.68					
JOBSECTO	.74					
LANG	.73					
MARITAL	.76					
MBSCORE	.96					
METHOD	.60					
MONITOR	.73					
OLOADTOT	.79					
PCORGTOT	.60					
PLANNING	.54					
POSTOT	.77					
PSSTOT	.80					
QUELANG	.77					
REDEF05	.68					
STATETOT	.80					
SUPCHILD	.70					
TENURE	.74					
TIMEPOSI	.68					
TRAITTOT	.79					
WORKHOME	.57					
WORKWEEK	.72					
AGE	.67					
AFFECTED	.69					
ACOMITOT	.80					
HBPREEN	.95					

Note: Proposed factor labels in italics indicate the main theme of the variables making up the factor. N=208 due to listwise deletion of missing cases. Variables entered into the analysis represent a comprehensive accounting of the non-PPA aspects of the study questionnaire.

factor 4 and 5 (-.65 and .42 respectively); and time employed in present position (TIMEPOSI) was found to be associated with both factor 10 and 4 (-.49 and .47 respectively) (See Appendix L).

Factor 1 has been tentatively labelled "distress" and was found to account for 11.8% of the explained variance. Factor 1 was composed of the following items: TRAITTOT (Trait Anxiety or Negative Affectivity), PSSTOT (Perceived Stress Scale), STATETOT (State Anxiety or Psychological Health) and CHIPSTOT (Physical Health Symptoms) loaded in this order. As this research was interested in both the psychological and physical aspects of health after the influence of trait anxiety/ negative affectivity had been accounted for, TRAITTOT, STATETOT and CHIPSTOT were not combined but retained as separate variables for subsequent analyses. The measure PSSTOT (perceived stress scale) was dropped from further analyses as it was suspected that the wording of the scale items tapped aspects of negative affectivity.

Factor 2 accounted for 7.8% of the explained variance and was composed of the following measures: Organizational Affective Commitment (ACOMITOT), Perceived Organizational Support (POSTOT), Job Satisfaction (JOBSATOT), and Perceived Organizational Control (PCORGTOT). For the purposes of this research, POSTOT and PCORGTOT had been identified as theoretically relevant coping resources and were retained as separate measures. In keeping with past research on job stress (e.g., Bhalla, 1989), the measures Organizational Affective Commitment (ACOMITOT) and Job Satisfaction (JOBSATOT) were found to be significantly correlated ($r=.54$, $p<.0001$). These variables were identified as organizational outcome measures in the model under

study and were combined to form a composite measure of organizational affective well-being (ACOMJSAR). Support for combining these two measures (i.e., job satisfaction and organizational affective commitment) to form a composite measure of organizational affective well-being comes from the findings of Bhalla (1989), where similar patterns of relationships between work stressors and outcomes related to job satisfaction and organizational commitment were found. She concluded that measures of job satisfaction and organizational commitment share a similar affective construct (Bhalla, 1989).

Factor 3 identified preventive aspects of health behaviour and as indicated in Appendix L the variables loading on this factor were highly related and redundant. The variable HBPREVEN, which reflects the subscale scores for wellness behaviours or preventive habits from the Vickers et al. (1990) measure was retained for subsequent analysis as planned.

Organizational descriptors or demographics, such as age, tenure (time employed in government), employment status and job category loaded on factor 4, accounting for 6.3% of explained variance. All variables under this factor were found to have strong loadings with the exception of the variable PLANNING. This variable was related to whether or not participants were eligible and planning to take advantage of early retirement options and was found to be significantly correlated with age ($r=.19$, $p<.01$), employment status ($r= -.23$, $p<.0001$), and tenure ($r=.29$, $p<.01$). Due to this variable's weaker loading on this factor and its significant correlations with the other demographic variables, it was dropped from subsequent analyses. The other variables, AGE, TENURE, ESTATUS and JOBCATR were retained as separate variables for subsequent

analyses.

Clear aspects of the construct of job insecurity emerged in Factor 5 and accounted for an additional five percent of explained variance. The variables: AFFECTED (whether or not the individual was identified as "affected" by downsizing), JOBSECTO (the job insecurity items adapted from Brockner et al. (1992), and JINSECTO (the Davy et al. (1991) job insecurity items) which made up this factor, were combined to form a composite Job Insecurity measure (JOBINSEC).

Factor 6 was made up of two coping variables, cognitive redefinition (REDEF05) and self-efficacy concerning coping with restructuring and downsizing (EFFICATO), as well as variables related to perceptions of economic resources (ECONOMIC) and continuance commitment (CCOMITOT). REDEF05 and EFFICATO were retained as separate coping variables, whereas ECONOMIC and CCOMITOT were dropped.

The variable MBSCORE from Factor 7 was retained in favour of either BLUNTING or MONITOR variables. MBSCORE reflects the difference score between monitoring and blunting coping styles and had the highest loading for this factor. Correlational analyses indicated that MBSCORE was significantly associated with both monitoring and blunting scores ($r=.78$, $p<.0001$ and $r=-.72$, $p<.0001$ respectively).

Factor 8 identified the factors that comprise the subscales in the Rizzo et al. (1970) measure of Job Role Stress, which were combined to form one composite measure of role stress (RRCAOS). This approach is further justified by the significant intercorrelations found in the present study among the three job role appraisal variables (role conflict, ambiguity and overload). In addition, past researchers have also combined

these three job role stress appraisal variables to form a composite measure of job stress (Brooke, Russell & Price, 1988). Noted earlier, however, AMBIGTOT or role ambiguity was also found to have a moderate to strong loading with Factor 2 (-.49687) suggesting some complexity with this variable.

For the most part, following the factor analysis, variables which had been identified in the theoretical and planning stages of this research were retained and used for subsequent analyses. Variables which had been included for descriptive purposes or which proved to be redundant with other factors were dropped.

Correlational Analyses.

The means, standard deviations, correlations and intercorrelations of study variables are presented in Tables 6 through 9. In order to reduce Type I error rates owing to the number of correlations conducted, a minimum level for significance was adopted at the .01 probability level instead of the customary .05 level.

Table 6 presents the correlations of the demographic variables with the organizational and health-related measures. Demographic variables were unrelated to any of the organizational and health-related criterion variables with the exception that higher job category or job level or status was significantly related to organizational affective well-being ($r=.23$, $p<.0001$). Trait anxiety or negative affectivity was found to be unrelated to any of the demographic variables except for lower employment status (e.g., term or contract work) ($r=-.18$, $p<.01$).

Table 6

Descriptive Statistics and Correlations Between Demographic and Organizational and Health-Related Variables

Variable	N	Mean	SD	TRAITTOT	STATETOT	CHIPSTOT	ACOMJSAR
AGE (yrs)	221	42.03	8.33	-.15	-.10	-.09	.03
GENDER	224	.67	.47	-.01	.05	.09	.07
ESTATUS	222	.82	.39	-.18 *	-.07	-.10	.15
TENURE (mo)	222	180.47	96.66	-.16	-.13	-.11	.07
JOBCTR	221	3.28	1.66	-.05	-.08	-.16	.23***
EDUC	220	4.02	1.49	.01	-.00	-.09	-.15
MARITAL	222	.65	.48	.01	-.04	.03	.04
LANG	222	.54	.48	-.10	-.14	-.02	-.05

Note:***p<.0001, **p<.001, *p<.01

AGE in years; GENDER dummy coded 0=male, 1=female; Employment Status (ESTATUS) dummy coded 1=indeterminate (full-time), 0=term or other/contract; TENURE in months refers to time spent in government; JOBCTR refers to Job Category and job level organized by government-wide organizational hierarchy ranging from 1 (clerks) to 7 (senior managers); Education (EDUC) ranging from 1 (less than Grade 12) to 6 (post-graduate degree); Marital Status (MARITAL) dummy coded 1= married or attached, 0= single or unattached; First Language (LANG) dummy coded 1=English, 0=French or other language; Trait Anxiety (TRAITTOT); State Anxiety or Psychological Health or Distress (STATETOT); Physical Health Symptoms (CHIPSTOT); and Organizational Affective Well-Being (ACOMJSAR) which is a composite of the Job Satisfaction and Affective Commitment Scales.

Table 7 presents the correlations and intercorrelations among the stressor variables and organizational and health-related criteria. The job role stressor variables (i.e., role conflict, ambiguity and overload) were significantly intercorrelated. Strong significant interrelationships among the job insecurity variables were also noted. There were, however, weaker correlations between the set of job role stress variables and the job insecurity indices suggesting that the job role stress variables and the job insecurity variables may reflect different (and independent) sources of stress in the workplace. Job role stress (i.e., job role ambiguity, conflict and overload) as well as job insecurity variables, with the exception of the "affected" variable, showed moderate and significant associations with organizational affective well-being and psychological and physical health measures. With the exception of the "affected" variable, the job role stress and job insecurity measures were found to be also significantly related to negative affectivity scores.

Trait anxiety or negative affectivity was found to be significantly correlated with the organizational and health-related criterion variables (i.e., state anxiety or psychological well-being (STATETOT) ($r=.73$, $p<.0001$), physical health symptoms (CHIPSTOT) ($r=.51$, $p<.0001$), and the composite measure of organizational affective well-being (ACOMJSAR) ($r=-.25$, $p<.0001$) (see Table 7).

Table 7

Descriptive Statistics and Correlations Among Job Role Stress, Job Insecurity, Organizational and Health Related Variables

Variable	N	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. AMBIGTOT	224	17.60	6.17												
2. OLOADTOT	224	19.43	8.58	.39***											
3. CONFLTOT	224	18.51	7.71	.37***	.59***										
4. Job Stress (RRCAOS)	224	55.54	18.05	.69***	.86***	.83***									
5. JINSECTO	224	13.13	3.51	.33***	.11	.20*	.25***								
6. JOBSECTO	224	20.07	7.91	.11	.02	.23***	.15	.58***							
7. AFFECTED	222	.18	.38	-.10	-.13	-.09	-.13	.39***	.43***						
8. Job Insecurity (JOBINSEC)	224	33.78	10.54	.19*	.05	.24***	.19*	.78***	.96***	.49***					
9. TRAITOT	224	38.96	10.51	.31***	.24***	.20*	.31***	.17*	.20*	.06	.21*				
10. STATETOT	224	39.88	12.26	.31***	.26***	.20*	.31***	.20*	.25***	.06	.25***	.73***			
11. CHIPSTOT	224	27.61	20.31	.37***	.36***	.31***	.43***	.28***	.27***	.07	.30***	.51***	.57***		
12. ACOMJAR	224	70.59	17.54	.38***	-.02	-.20*	-.23***	.29***	-.35***	-.13	-.37***	-.25***	-.24***	-.20*	

Note: ***p<.0001, **p<.001, *p<.01

AMBIGTOT, OLOADTOT, and CONFLTOT refer to the Job Role Ambiguity, Overload and Conflict subscales developed by Rizzo et al., 1970. Each subscale is made up of 5 items scored on a 7 point Likert scale. The Job Stress variable (RRCAOS) is a composite of Job Role Ambiguity, Overload and Conflict subscales. Job Insecurity (JOBINSEC) is a composite of items adapted from Caplan et al., 1975; Brockner et al., 1992; and Davy et al., 1991 and the 'affected status' variable. The Davy et al., (1991) and Brockner et al., (1992) are reflected in JINSECTO and JOBSECTO sections noted above. JINSECTO is comprised of 4 items scored on a 5-point Likert scale; JOBSECTO is comprised of 4 items scored on 10-point Likert scales. AFFECTED is a single item measure scored 1=yes, 0=no identified as "affected" or "surplus" by the government downsizing exercise; Trait Anxiety or Negative Affectivity (TRAITTOT); State Anxiety (STATETOT); Physical Health Symptoms (CHIPSTOT); Organizational Affective Well-Being (ACOMJSAR) which is a composite of the Job Satisfaction and Affective Organizational Commitment Scales. N values may change owing to missing data.

An examination of Table 8 indicates relatively few significant interrelationships among the different coping resources variables. With the exception of monitoring and blunting coping style variables, the coping resource variables outlined in Table 8 were found to be significantly associated with the range of organizational and health-related outcomes. Most notably, POS and perceived organizational control were most strongly correlated with organizational affective well-being. Further, these variables also showed significant relations with the psychological and physical health outcome measures. The efficacy resource variable was also found to be significantly related to psychological and physical health measures but not associated with organizational affective well-being. Preventive health behaviours were found to be negatively related to psychological health outcomes ($r = -.23$, $p < .0001$) but unrelated to either organizational affect or physical health symptoms.

Table 9 presents correlations among the different coping response measures and organizational and health-related outcomes. As can be seen in this table, the various coping responses were found to be unrelated to physical and affective health indices, excepting a significant positive correlation between cognitive redefinition coping (REDEF05) and psychological distress (STATETOT). This indicated that lower optimism or less cognitive redefinition was associated with more psychological distress/anxiety.

Table 8

Descriptive Statistics and Correlations Among Coping Resources and Organizational and Health-Related Variables

Variable	N	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. POSTOT	224	33.46	10.43											
2. PCORGTOT	224	5.89	1.81	.47***										
3. MONITOR	224	9.28	2.70	-.19*	-.10									
4. BLUNTING	224	4.20	2.46	-.04	-.02	-.13								
5. MBSCORE	224	5.08	3.87	-.10	-.06	.78***	-.72***							
6. EFFICATO	224	9.03	3.06	-.11	-.12	.17*	-.12	.20*						
7. HBPREVEN	224	35.76	11.01	-.03	.12	-.03	.12	-.10	-.10					
8. TRAITTOT	224	38.96	10.51	-.27***	-.15	.11	-.12	.16	.25***	-.23***				
9. STATETOT	224	39.88	12.26	-.26***	-.17*	.06	-.15	.14	.19*	-.23***	.73***			
10. CHIPSTOT	224	27.61	20.31	-.27***	-.27***	.12	-.03	.10	.23***	-.15	.51***	.57***		
11. ACOMJSAR	224	70.59	17.54	.62***	.40***	-.06	-.03	-.02	-.04	-.06	-.25***	-.24***	-.20**	

Note: ***p<.0001, **p<.001, *p<.01

Organizational Coping Resource variables include: Perceived Organizational Support (POSTOT) and Perceived Organizational Control (PCORGTOT). Personal Coping Resources include: Coping Styles, (1) Monitoring Style (MONITOR), (2) Blunting Style (BLUNTING) and Monitoring minus Blunting (MBSCORE); Change Specific Efficacy (EFFICATO); Preventive Health Behaviours (HBPREVEN). Trait Anxiety or Negative Affectivity (TRAITTOT); State Anxiety (STATETOT); Physical Health Symptoms (CHIPSTOT); Organizational Affective Well-Being (ACOMJSAR) which is a composite of the Job Satisfaction and Affective Organizational Commitment Scales.

N values may change owing to missing data.

Table 9

Descriptive Statistics and Correlations Among Ashford Coping Response Variables and Organizational and Health-Related Variables

Variable	N	Mean	SD	1	2	3	4	5	6	7	8
1. COGAVOID	224	8.87	2.80								
2. INFOSEEK	224	5.87	2.41	-.45***							
3. EMOTDISC	224	8.52	3.22	-.30***	.36***						
4. REDEF05	223	2.61	1.27	-.02	.16	-.05					
5. TRAITTOT	224	39.96	10.51	-.09	.12	-.12	.19*				
6. STATETOT	224	39.88	12.26	-.01	.08	-.11	.23***	.73***			
7. CHIPSTOT	224	27.61	20.31	.01	.01	-.11	.16	.51***	.57***		
8. ACOMJSAR	224	70.59	17.54	.05	-.14	-.04	-.05	-.25***	-.24***	-.20*	

Note: ***p<.0001, **p<.001, *p<.01

Coping responses specific to organizational downsizing and restructuring adapted from the Ashford (1988) coping response measure include the following subscales: Cognitive Avoidance (COGAVOID), Information Seeking (INFOSEEK), Emotional Discharge (EMOTDISC), and Cognitive Redefinition (REDEF05); higher scores on REDEF05 indicate less redefinition or lower optimism whereas for the other coping scale a higher score indicates more of the coping indicated by the scale. Trait anxiety or Negative Affectivity (TRAITTOT), State Anxiety (STATETOT), Physical Health Symptoms (CHIPSTOT); Organizational Affective Well-Being (ACOMJSAR) which is a composite of the Job Satisfaction and Affective Organizational Commitment Scales. N values may change owing to missing data.

Canonical Correlation.

This study was largely concerned with the adaptational aspects of coping with downsizing stress. Downsizing stress was believed to comprise both coping aspects of job insecurity and job role stressors impacting upon multiple stress reactions: physical and psychological health, and organizational affective well-being. Therefore, it was of interest to examine the independence of coping variables and stressor/stress reactions. To this end a Canonical Correlation Analysis was performed on the set of coping variables (coping resources and coping responses) and the set of job stressors and health- and organizational-related outcomes (i.e., job insecurity, role stress, physical symptoms, psychological symptoms, organizational affect). Table 10 presents the results of the canonical analysis of job stressors/stress and coping variables. This analysis produced three significant canonical variates which together accounted for 80% of the explained variance. Canonical variates represent the linear combination of variables in one set that maximally predicts the linear combination of variables in the other set (Ganster, Fusilier & Mayes, 1986; Tabachnick & Fidell, 1996). Interpretation of each canonical variate is achieved by examining the structural coefficients. Structural coefficients are the (zero-order) correlations of the canonical variate with its constituent variables (Cohen and Cohen, 1983). As indicated in Table 10, the first canonical variate explained 56% of the overlapping variance (canonical $r=.75$, $p<.0001$) and suggests that individuals with more job role stress ($r= -.35$) and job insecurity ($r= -.31$) were more likely to experience lower organizational affective well-being ($r=.70$), and perceive less organizational support ($r=.84$). The second variate, explaining 16 % of the variance (canonical $r= .40$, $p<.0001$)

Table 10

Canonical Correlation Analysis of Job Stressors/Stress and Coping Variables

Variable	<u>Structural Coefficients</u>		
	Canonical Variable 1	Canonical Variable 2	Canonical Variable 3
Set 1			
RRCAOS	-.35	-.10	.58
JOBINSEC	-.31	.47	-.70
CHIPSTOT	-.03	.30	-.47
STATETOT	-.06	.62	.74
ACOMJSAR	.70	.62	-.07
Redundancy	.19	.04	.01
Set 2			
EFFICATO	-.07	.24	-.02
HBPREEN	-.07	-.68	-.19
MBSCORE	.03	.04	.18
PCORGTOT	.28	-.21	.89
POSTOT	.84	.21	-.52
COGAVOID	-.01	.10	-.45
EMOTDISC	.05	-.37	-.37
REDEF05	.20	.35	.10
INFOSEEK	-.25	-.22	.31
Canonical Correlation	.75	.40	.29
CanCorr Sq	.56	.16	.08
Wilk's	.32	.72	.86
Chi-Sq	246.06	69.73	32.67
DF	45.00	32.00	21.00
Sig	.0001	.0001	.05

Note: Set 1 includes Job Role Stress (RRCAOS), Job Insecurity measures (JOBINSEC), Physical health symptoms (CHIPSTOT), Psychological Health or State Anxiety (STATETOT), and Organizational Affective Well-Being (ACOMJSAR); Set 2 includes the following coping resources: Change specific efficacy (EFFICATO), Preventive Health behaviours (HBPREEN), Coping Style, Monitoring minus Blunting Score (MBSCORE), Perceived Organizational Control (PCORGTOT), Perceived Organizational Support (POSTOT), and coping responses, cognitive avoidance (COGAVOID), emotional discharge (EMOTDISC), Cognitive Redefinition (REDEF05), and Information Seeking (INFOSEEK).

suggests that downsizing stress, most notably reflected in job insecurity and affective outcomes, was related to fewer preventive health behaviours ($r = -.68$), fewer coping efforts aimed at emotional discharge ($r = -.37$) and cognitive redefinition ($r = .35$). The third variate, accounting for only 8% of the overlapping variance (canonical $r = .29$, $p < .05$) suggests that downsizing stress and psychological and physical health outcomes were related to a range of coping resources/responses. The results of the Canonical Correlation Analysis were consistent with the correlational analyses presented earlier in Tables 7, 8 and 9.

Canonical Correlation Analysis includes a redundancy analysis that provides an assessment of the amount of variance in one set of variables (i.e., job stressors and health- and organizational outcomes) that is explained by the set of predictor variables in the second set (i.e., coping resources and coping responses) (Ganster et al., 1986; Tabachnick & Fidell, 1996). The results of the redundancy analysis are presented in Table 10. Low redundancy between the first and second sets of variables was found for each canonical variate (i.e., redundancies from .19 to .01) suggesting independence between the coping and stressor-stress reaction variables.

Analysis of Pre-existing Health Problems.

As this research is focused on the health consequences of stress appraisal and coping with organizational downsizing it is important to rule out the possibility of systematic influence on health outcomes as a function of pre-existing health standing. To assess pre-existing health issues, the narrative detail in the completed questionnaires was reviewed by two individuals (one Anglophone and one Francophone). Any mention

of pre-existing health problems was recorded verbatim and later reviewed by two psychologists and this researcher. Decisions concerning whether or not the health issues comprised a pre-existing health problem were made through discussion. For example, health issues such as arthritis, hypertension, heart disease, diabetes, kidney disease, stomach ulcers, breast cancer, and auto-immune disease were categorized as pre-existing health problems whereas, no mention of a health problem or minor problems such as food poisoning, skin treatment, and allergies were not.

In order to test whether or not pre-existing health status influenced stress appraisal or psychological, physical or organizational health outcomes a MANOVA with discriminant function analysis was conducted. Demographic predictors were physical health symptoms (CHIPSTOT), psychological health or state anxiety (STATETOT), negative affectivity (TRAITTOT), organizational affective well-being (ACOMJSAR), job insecurity (JOBINSEC), and job role stress (RRCAOS). Groups were pre-existing health problems (EXISTHEA) yes or no.

The analysis was conducted on the sample of 224 cases with no missing data, resulting in a non-significant MANOVA ($F(6,217) = .16$) and non-significant Univariate F-tests. These results suggest pre-existing health problems were unrelated to the reporting of organizational stress and the range of health criteria used in this study.

Multiple Regression Analyses

Analyses of Outliers.

Tests for multivariate outliers in the regression analyses identified ten cases by Mahalanobis Distance. In order to investigate the reasons for and influence of the identified outliers, a number of assessments were conducted. First, data entry and coding of missing data were re-evaluated and no data entry or coding errors were found. Second, regression analysis using a stepwise approach was conducted for each case using a dummy variable for case as the dependent variable (i.e., the specific case under study coded as 1 and all other cases coded 0). The result was the identification of the variables for each case which significantly separated the case from the remaining cases (i.e., contributed to the extremeness of the case). Residual plots for each case using the dummy variable approach were studied. The results indicated the removal of two cases was warranted: case 26 (Mahalanobis Distance or X^2 (df,16)= 33.3, $p<.01$) and case 10 (Mahalanobis Distance or X^2 (df,16)= 32.7, $p<.01$). Analyses on case 26 indicated extreme scores on job insecurity and physical health measures. Narrative detail in the original questionnaire identified this case as having a pre-existing history of childhood sexual assault and hypertension. As this study was most concerned with the health effects of downsizing stress and a recognition that a history of childhood sexual assault may influence stress appraisal and health outcomes, this case was removed from further analyses.

Analysis of case 10 indicated extreme scoring on job insecurity and an unusual pattern of responses on perceived organizational support and two coping variables,

emotional discharge and cognitive redefinition (i.e., extreme high scores on job insecurity and perceived organizational support with extreme low scores on emotional discharge and cognitive redefinition coping). Review of the narrative detail for this case indicated that this individual had joined this department 3 months prior to testing, and had already experienced downsizing status in two different government departments in the recent past. As this experience may have influenced the unusual pattern of responding and extreme nature of scores, case 10 was also dropped from further analyses⁶.

Hierarchical Multiple Regression Analysis.

The major interest in this research is theoretically based on Lazarus' interactional model of coping and health (Lazarus & Folkman, 1984, 1987) and is concerned with testing the main and interactive roles of a set of coping resources, coping styles, coping responses and downsizing stress appraisal variables on health-related outcomes after the influence of demographic variables (i.e., age, gender, tenure and job category) and trait negative affectivity (or neuroticism) have been statistically accounted for in a sample confronting the threat of organizational downsizing.

To examine the effects of person-environmental influences on health-related outcomes for individuals confronting the threat of downsizing, hierarchical multiple regression for each health-related outcome using SPSS REGRESSION was conducted and organized in the following steps (or blocks): the demographic variables (i.e., age, gender, tenure, and job category) were entered first (block 1), followed by trait negative affectivity (block 2), the downsizing stress appraisal variables (i.e., job role stress and job insecurity) (block 3), organizational coping resources (i.e., perceived organizational

support (POS) and perceived organizational control) (block 4), and personal coping resources/responses (i.e., change specific efficacy, preventive health behaviours, coping style, cognitive avoidance, emotional discharge, cognitive redefinition, and information seeking concerning restructuring/downsizing) (block 5).

Tables 11 to 13 present the results of the hierarchical multiple regression analyses for the different health and organizational-related outcomes. Each of these regression analyses was conducted on the sample of 222 cases. Five cases of pairwise missing data were dropped from the analyses, resulting in a usable sample of 217.

Table 11 outlines the results of the hierarchical regression for physical health symptoms (CHIPS) as the dependent measure. As indicated in Table 11, roughly 40% of the total variance in physical health outcomes was explained by the variables in this analysis with the major independent contributions being made by the variables negative affectivity (TRAITTOT) and stress appraisal (RRCAOS). Interestingly, the demographic variables, age, gender, tenure and job category were not found to be significantly linked to physical health, whereas negative affectivity (TRAITTOT) was found to account for significant increments in explained variance in physical health outcomes (incremental increases of 25% in explained variance, R^2 change = .25, $F(5, 212) = 72.85$, $p < .00001$, $\beta = .506$). The stress appraisal variables (job role stress (RRCAOS) and job insecurity (JOBINSEC)) entered in the third block of the analysis were found to be responsible for a further gain of 10% in explained variance (R^2 change = .10, $p < .00001$). Job role stress (RRCAOS) was a significant contributor to explained variance at this stage ($\beta = .313$, $F(7, 210) = 21.55$, $p < .00001$) while job insecurity ($\beta = .114$, $F(7, 210) = 1.22$, $p = \text{n.s.}$) was not.

Table 11

Hierarchical Multiple Regression Analysis of Sample Demographics, Stress Appraisal and Coping Scores on Physical Health Symptoms (CHIPS)

	MultiR	Rsqr	AdjRsqr	RSqrCh	F(Ch)	DF	SigFCh
Block 1							
Demographics	.188	.035	.017	.035	1.95	4,213	.1033
Block 2							
Neg. Affect	.531	.282	.265	.247	72.85	5,212	.00001
Block 3							
Stress Appraisal	.616	.380	.359	.098	16.51	7,210	.00001
Block 4							
Org. Coping	.620	.385	.358	.005	.87	9,208	.4187
Block 5							
Personal Coping	.636	.405	.358	.020	.97	16,201	.4514

Variable	β Final Eq.
JOBCATR	-.177
GENDER	.050
TENURE	-.041
AGE	-.018
TRAITTOT	.506
RRCAOS	.313
JOBINSEC	.114
PCORGTOT	-.085
POSTOT	.004
INFOSEEK	-.057
EFFICATO	.104
MBSCORE	-.013
EMOTDISC	.057
HBPREEN	-.058
REDEF05	.041
COGAVOID	.028

Note: Block 1 included the demographic variables Job Category (JOBCATR) ranging from 1 (clerks) to 7 (senior managers), Gender with male=1 and female=2, Tenure (time in public service) in months, and age in years; Block 2 entered the measure of Negative Affectivity (TRAITTOT); Block 3 included two stress appraisal variables: (1) RRCAOS which is a composite of subscales Role Conflict, Ambiguity and Overload and (2) JOBINSEC which is a composite of job insecurity indices including "affected status" (y/n), and the Davy and Brockner job insecurity items; Block 4 entered two organizational coping variables: PCORGTOT (perceived organizational control) and POSTOT (perceived organizational support); in Block 5 the personal coping variables were entered: EFFICATO (change specific efficacy), MBSCORE (difference score from the coping style measure of Monitoring and Blunting), HBPREEN (preventive health behaviours), and the Coping Measure related to downsizing/ restructuring subscales: INFOSEEK (information seeking), COGAVOID (cognitive avoidance), EMOTDISC (sharing worries with others), and REDEF05 (cognitive redefinition).

The coping variables did not add significantly to the explanation of physical health symptoms after the influence of the demographic variables. Negative affectivity and stress appraisal had been considered earlier in the regression analysis.

The results of the hierarchical regression analyses with psychological health (state anxiety) as the dependent measure are summarized in Table 12. Negative affectivity (TRAITTOT) resulted in gains of 51% in explained variance after the demographic variables had been considered in the regression analysis (R^2 change=.512, β =.729, $F(5.212)=232.23$, $p<.00001$). The stress appraisal variables, on the other hand contributed to less than 2 percent in incremental gains in explained variance in psychological health (R^2 change=.015, $F(7.210)=3.50$, $p<.03$). In total, roughly 57% of the variability in psychological health outcomes was accounted for in this analysis. Negative affectivity (TRAITTOT) was the major contributor to the variance explained, probably because negative affectivity and psychological health (state anxiety) were found to be highly associated ($r=.73$, $p<.0001$) (see Table 6).

Table 13 presents the results of the hierarchical multiple regression analysis with organizational affective well-being (ACOMJSAR) as the dependent measure, which is a composite of job satisfaction and organizational affective commitment measures. As indicated in Table 13, the demographic variables explained a small but significant amount of the variance in affective outcomes ($R^2=.072$, $F(4,213)=4.14$, $p<.003$) and job category (JOBCATR) was the most significant contributor ($\beta=.229$, $F(4,213)=8.48$, $p<.004$). This suggests that significant variability in organizational affective well-being is related to where one is in the organizational hierarchy, with those positioned at higher levels of the

Table 12

Hierarchical Multiple Regression Analysis of Sample Demographics, Stress Appraisal and Coping Scores on Psychological Health/ State Anxiety (STATETOT)

	MultiR	Rsq	AdjRsq	RSqCh	F(Ch)	DF	SigFCh
Block 1							
Demographics	.143	.020	.002	.020	1.11	4,213	.3514
Block 2							
Neg. Affect	.730	.533	.522	.512	232.23	5,212	.00001
Block 3							
Stress Appraisal	.740	.548	.533	.015	3.50	7,210	.0321
Block 4							
Org. Coping	.740	.548	.530	.000	.08	9,208	.9256
Block 5							
Personal Coping	.755	.570	.535	.022	1.45	16,201	.1882

Variable	β Final Eq.
JOBCATR	-.097
GENDER	.021
TENURE	-.105
AGE	-.042
TRAITTOT	.729
RRCAOS	.101
JOBINSEC	.086
PCORGTOT	.010
POSTOT	-.021
INFOSEEK	-.002
EFFICATO	.003
MBSCORE	-.023
EMOTDISC	.008
HBPREEN	-.105
REDEF05	.119
COGAVOID	.058

Note: Block 1 included the demographic variables Job Category (JOBCATR) ranging from 1 (clerks) to 7 (senior managers), Gender with male=1 and female=2, Tenure (time in public service) in months, and age in years; Block 2 entered the measure of Negative Affectivity (TRAITTOT); Block 3 included two stress appraisal variables: (1) RRCAOS which is a composite of subscales Role Conflict, Ambiguity and Overload and (2) JOBINSEC which is a composite of job insecurity indices including "affected status" (y/n), and the Davy and Brockner job insecurity items; Block 4 entered two organizational coping variables: PCORGTOT (perceived organizational control) and POSTOT (perceived organizational support); in Block 5 the personal coping variables were entered: EFFICATO (change specific efficacy), MBSCORE (difference score from the coping style measure of Monitoring and Blunting), HBPREEN (preventive health behaviours), and the Coping Measure related to downsizing/ restructuring subscales: INFOSEEK (information seeking), COGAVOID (cognitive avoidance), EMOTDISC (sharing worries with others), and REDEF05 (cognitive redefinition).

Table 13

Hierarchical Multiple Regression Analysis of Sample Demographics, Stress Appraisal and Coping Scores on Organizational Affective Well-being (ACOMJSAR)

	MultiR	Rsq	AdjRsq	RSqCh	F(Ch)	DF	SigFCh
Block 1							
Demographics	.269	.072	.055	.072	4.138	4,213	.0030
Block 2							
Neg. Affect	.364	.133	.112	.061	14.828	5,212	.0002
Block 3							
Stress Appraisal	.496	.246	.220	.113	15.702	7,210	.00001
Block 4							
Org. Coping	.662	.439	.414	.193	35.773	9,208	.00001
Block 5							
Personal Coping	.706	.499	.459	.060	3.445	16,201	.0017

Variable	β Final Eq.
JOBCATR	.229
GENDER	.122
TENURE	-.002
AGE	-.091
TRAITTOT	-.251
RRCAOS	-.215
JOBINSEC	-.299
PCORGTOT	.231
POSTOT	.518
INFOSEEK	-.158
EFFICATO	.069
MBSCORE	.007
EMOTDISC	-.077
HBPREEN	-.132
REDEF05	.138
COGAVOID	.010

Note: Block 1 included the demographic variables Job Category (JOBCATR) ranging from 1 (clerks) to 7 (senior managers), Gender with male=1 and female=2, Tenure (time in public service) in months, and age in years; Block 2 entered the measure of Negative Affectivity (TRAITTOT); Block 3 included two stress appraisal variables: (1) RRCAOS which is a composite of subscales Role Conflict, Ambiguity and Overload and (2) JOBINSEC which is a composite of job insecurity indices including "affected status" (y/n), and the Davy and Brockner job insecurity items; Block 4 entered two organizational coping variables: PCORGTOT (perceived organizational control) and POSTOT (perceived organizational support); in Block 5 the personal coping variables were entered: EFFICATO (change specific efficacy), MBSCORE (difference score from the coping style measure of Monitoring and Blunting), HBPREEN (preventive health behaviours), and the Coping Measure related to downsizing/ restructuring subscales: INFOSEEK (information seeking), COGAVOID (cognitive avoidance), EMOTDISC (sharing worries with others), and REDEF05 (cognitive redefinition).

organization faring better on affective measures of well-being.

Incremental gains in explained variability in organizational affective well-being was also found for negative affectivity, entered in the second block of the analysis ($R^2\text{change}=.061$, $F(5,212)=14.83$, $p<.0002$) (See Table 13). The stress appraisal variables (RRCAOS and JOBINSEC), entered in block 3, added another 11% to the variance explained ($R^2\text{change}=.113$, $F(7,212)=15.70$, $p<.00001$). At block 3, both job insecurity and job role stress contributed significant amounts to the variance explained in affective outcomes (for JOBINSEC, $F(7,212)=19.94$, $p<.00001$ and for RRCAOS, $F(7,212)=6.12$, $p<.014$).

Interestingly, both the organizational coping variables and the personal coping variables entered at block 4 and 5 contributed significant gains in the explanation of organizational affective well-being. Incremental gains of 19% in explained variance were achieved at block 4 for the organizational coping variables ($R^2\text{change}=.193$, $F(9, 208)=35.77$, $p<.00001$). At this stage of the analysis, the variable Perceived Organizational Support (POSTOT) was the strongest contributor to variance explained ($\beta=.518$, $F(9,208)=65.13$, $p<.00001$) whereas Perceived Organizational Control (PCORGTOT) did not significantly contribute to the prediction of organizational affective well-being ($\beta=.231$, $F(9,208)=2.54$, $p= \text{n.s.}$). At the last stage of the analysis, personal coping variables added incremental gains of 6% to the variance explained ($R^2\text{change}=.060$, $F(16, 201)=3.45$, $p<.002$). Coping responses related to information seeking (INFOSEEK) were the strongest contributor to explained variance at Block 5 ($\beta=.158$, $F(16, 201)=8.25$, $p<.005$). The other personal coping variables which

approached significance at this stage were cognitive redefinition (REDEF05) ($\beta=.138$, $F(16, 201)=5.62$, $p<.02$) and preventive health behaviours (HBPREVEN) ($\beta=-.132$, $F(16, 201)=4.80$, $p<.03$).

A number of planned tests of interaction effects were conducted by a series of separate hierarchical multiple regression analyses. This approach was based on hypothesized interaction effects among the stress and coping variables under study and was a more conservative approach than omnibus tests of buffering effects. It was assumed that the most theoretically important variables had been chosen for the planned interaction tests. Planned tests of interaction effects of these variables were an attempt to reduce Type I error rate, but may have done so at the expense of power if the most important theoretically sound variables had not been chosen. These regression analyses took the following format: Block 1, the demographic control variables, age, gender, tenure, and job category were entered first. At block 2, the variable related to negative affectivity was entered as another control variable. Then the variables under study were entered simultaneously at block 3, followed by the product term at block 4. While these analyses confirmed the previously noted main effects for stress appraisal and select coping variables (e.g., POS), none of the interaction effects were significant. As no significant interaction effects emerged from these planned interaction test, these analyses will not be discussed any further.

Discussion

This research explored the effects of downsizing on psychological and physical health, as well as on organizational affective well-being in a sample of federal public servants during the second year of conspicuous organizational downsizing, restructuring and change. This sample was chosen because of the long standing nature of the downsizing threat, thus allowing examinations of the effects of chronic stress on physical and psychological health and organizational well-being.

The present research was framed within the theoretical model of coping and health proposed by Lazarus and Folkman (1984, 1987) and explored main and interactional relationships among monitoring and blunting coping styles; coping resources such as situational efficacy beliefs or perceived control, perceived organizational support, pro-active self-care practices or health behaviours; and coping responses. Within such a theoretical framework, negative environmental/ situational factors (e.g., job insecurity), and high job demands (job role), were recognized for their influence on stress/ threat appraisal.

An important aspect of this study is that, in addition to the conventional control variables used in organizational stress research, control for trait negative affectivity (NA) was applied to the research design, which was correlational and cross-sectional, and used a one-time self-reporting questionnaire format. Because this design did not allow for drawing conclusions concerning causal relationships among the coping and health variables, any use of terms implying prediction or outcome are for the sake of

convenience rather than to imply causation. For the reader's convenience a diagram of the theoretical model under study is included here (see Figure 2). This diagram outlines where on the model the variables under study are located and how they are positioned relative to overall framework of "the coping process" proposed by Lazarus & Folkman (1984, 1987).

The Major Findings

The major findings of this research are:

1. Demographic factors such as age, gender, employment status, length of time employed by the federal government (tenure), job category, education, marital status, and first language spoken were not significantly associated with physical or psychological health-related outcomes. However, within the set of demographic control variables, higher job category was significantly associated with more positive organizational affective well-being scores, suggesting that the higher one is in the organizational hierarchy, the more likely one may feel satisfied or positively attached to the organization.
2. Negative affectivity (NA) was found to be a significant and independent predictor of higher physical health symptom reporting, psychological distress, and lower organizational affective well-being.
3. Downsizing stress appraisal, made up of job insecurity and job role stress appraisals (i.e., role overload, ambiguity and conflict), proved to be a powerful, independent contributor to explained variance in physical health outcomes and organizational affective well-being, beyond that explained by the demographic

Figure 2. The Coping Process (adapted from Lazarus & Folkman, 1984, 1987; Kelloway & Barling, 1991; Taylor, 1995)

control variables and NA. Job role stress appraisal (role conflict, ambiguity and overload) was found to be significantly related to physical health outcomes, whereas both job insecurity and job role stress appraisal significantly affected organizational affective well-being.

4. With the exception of Perceived Organizational Support (POS) and Perceived Organizational Control (PC), the set of coping variables (resources and responses) were found not to be consistently significantly related to the range of outcomes concerning physical and psychological health scores, and organizational affective well-being. Higher self-efficacy beliefs concerning downsizing/ restructuring however, were found to be significantly associated with better psychological and physical health outcomes. Coping characterized by positive cognitive redefinition and a higher incidence of positive preventive health behaviours (e.g., exercise) was significantly associated with lower scores on psychological distress.
5. Perceived Organizational Support (POS) and coping through information- seeking specific to the downsizing and restructuring were found to exert significant and separate main effects on organizational affective well-being outcomes. Higher levels of job role stress and job insecurity were related to lower perceptions of organizational support and more negative organizational affective well-being.

The discussion of the findings of this research will be presented in the same order as the hypotheses which guided this research. For the reader's convenience each hypothesis will be reviewed prior to the discussion of the findings for the health- and organizationally-related outcomes.

The Influence of Negative Affectivity (Hypothesis 1)

Negative affectivity (NA) was associated with more negative health reports and lower organizational affective well-being, thus supporting Hypothesis 1 (H1).

Measurement of this dispositional characteristic of individuals was included as a means of controlling for its possible biasing influence in the study of specific stress-health relationships and to evaluate its overall influence on stress-illness relationships. While there remains wide debate concerning the role of a stable "pervasive mood disposition" (Watson & Pennebaker, 1989, p. 234) known as Negative Affectivity (NA) in stress-health relationships, the need to include NA in the design of studies of stress has been well documented (Brief et al., 1988; Chen & Spector, 1991; Levin & Stokes, 1989; Watson et al., 1987).

Psychological and Physical Health Outcomes (H1).

NA was the single most powerful predictor of physical and psychological health symptom reports, and contributed to incremental gains in explained variance of 25% and 51%, respectively, after controlling for sample demographics. This observation suggests a strong link between the experience of NA and physical and psychological health reporting. Higher NA was found to be significantly associated with more negative physical health symptom reporting and with psychological distress (i.e., state anxiety).

The large amount of variance explained by NA in the measurement of state anxiety (the psychological health measure used) may relate to the highly significant and large correlation found in this study between NA (trait anxiety) and state anxiety .

Correlations between state and trait anxiety scores of this magnitude, however have been

previously noted in samples of working adults (Spielberger, 1983).

It might be asked: "Are the scores on the measure used for Negative Affectivity (NA) picking up pure dispositional trait-like characteristics of individuals that pre-date exposure to the stressor under study, or did the measure also pick up negative affective responses due to the long term temporal nature of the downsizing threat"? An answer to this question is not forthcoming using the present research design because NA was not measured prior to the onset of the threat but only during the second year of the downsizing initiative. The scale used in the present study to measure NA (STAI (T-Anxiety), Spielberger, 1983), however, has been shown to be a reliable measure of dispositional and stable characteristics of people who have a general tendency to experience negative and aversive emotional states and report more distress and somatic complaints regardless of the nature or existence of a stressor (Watson & Clark, 1984; Watson et al., 1987). The present study, however is most interested in assessing the effects of chronic downsizing stress on the health of employees working in a downsizing environment. The data in this study suggest that not all employees scored high on NA as evidenced by a normal distribution of scores across the sample.

In any event, the results of the present study attest to the significant influence of NA on psychological distress and physical health symptom reporting in that NA was significantly and positively correlated with reports of psychological and physical health symptoms and negatively related to organizational affective well-being. In addition, NA was found to account for significant proportions of the explained variance across all outcomes.

If, as others have argued, NA is characterized by exaggerated reporting and experiencing of somatic health symptoms, irrespective of objective health markers or health status, failure to control or account for the influence of NA in stress research may lead to the detection of inflated or false links to illness (Brief et al., 1988; Costa & McCrae, 1987; McCrae, 1990; Taylor, 1995; Watson & Clark, 1984; Watson & Pennebaker, 1989; Watson et al., 1987).

If NA represents a systematic negative bias which erroneously inflates stress-illness relationships, then such measurement (and control) is a relevant inclusion criteria for studies where no objective or alternative measure of health was available beyond that of self-reporting (Brief et al., 1988; Chen & Spector, 1991).⁷ Since NA was controlled in the present study and, as expected, accounted for a large amount of the explained variance, further significant contributions by the appraisal and coping variables to health outcomes may, with a degree of confidence, be owing to the operation of variables other than dispositional NA.

Organizational Affective Well-Being (H1).

While statistically significant, the relative influence of NA on organizational affective well-being outcomes was found to be less than that of the stress appraisal and coping variables considered later in the analyses. NA contributed only 6% to the explained variance in organizational affective well-being outcomes, as compared to gains of an additional 11% by the stress appraisal variables, 19% by organizational coping resources such as POS, and a further 6% by personal coping variables (e.g., information seeking). In addition, the relative contributions of NA to variance explained in

organizational outcomes was found to be less than that found for psychological and physical health (i.e., 6% relative to 25% and 51% respectively). These findings suggest that positive organizational affective well-being, defined as higher job satisfaction and affective commitment to the organization, is less influenced by NA than either physical or psychological health reports. The implications of the findings concerning the role of the appraisal and coping variables will be addressed later.

The findings in the present study of less influence of NA on positive affective organizational outcomes relative to that found for psychological and physical health reports are interesting in light of the emerging literature which suggests that NA is a distinct and separate construct from positive affective dimensions (Clark & Watson, 1991; Watson & Pennebaker, 1989). Indeed, the conceptual and statistical independence of positive and negative affect have been noted by many researchers (Diener, 1984; Diener & Emmons, 1985; George, 1992; Larsen & Ketelaar, 1991; Warr, 1990; Warr, Barter, & Brownridge, 1983; Watson, Clark & Tellegen, 1988; Watson & Slack, 1993; Watson & Tellegen, 1985; Zevon & Tellegen, 1982). Watson and Tellegen's (1985) reanalyses of a large number of studies of self-reported mood indicate that Negative and Positive Affect were found to consistently load as first and second rotated dimensions in orthogonal factor analyses. They found these two constructs to consistently emerge in cross-cultural studies and to "reflect real, universal, and fundamentally different processes" of emotional experience (Watson & Tellegen, 1985, pp. 232). Further, they suggest that Positive and Negative Affect dimensions may differentially discriminate between clinical ratings of depression and anxiety. They found NA to be strongly

associated with anxiety and right hemisphere functioning but to be unrelated to Positive Affect (PA). Lower PA was found to be significantly linked to clinical depression and to be more important in left hemispheric functioning than NA (Watson & Tellegen, 1985).⁸ Others have noted that NA is associated with primary neurotic traits which foster negative emotional experience, such as stress reaction, worry, anxiety, alienation and resentment, whereas PA relates to extraversion-sociability constructs, such as social potency and activity promoting positive experience (Larsen & Ketelaar, 1991; Watson et al., 1987, 1988). Indeed, Watson et al. (1987) argue that PA is "completely unrelated to stress perception and physical complaints" (pp. 151). A more recent review of the literature by Clark and Watson (1991), however, indicated that when indices of poor physical or psychological health were used in research designs, NA as well as, the low-end of the PA dimension influenced outcomes. When research focused on measures of positive health, PA was shown to play a more influential role than NA (Watson & Clarke, 1991).

Recent organizational studies suggest that combinations of both PA and NA exert independent influences on levels of job satisfaction over time (Watson & Slack, 1993), influence mood states at work (George, 1992; George & Jones, 1996), and positive and negative job experiences and affective personality tendencies, such as NA and PA, have been found to operate along two separate orthogonal paths to influence distress and well-being (Hart, Wearing, & Headley, 1995). In particular, Hart et al. (1996), testing a number of structural equation models (i.e., LISREL), found psychological distress and well-being to be influenced by two independent paths (i.e., positive and negative

affectivity paths). The above-noted findings suggest that future research designs may be strengthened by inclusion of measures of both NA and PA, as well as measures of both positive and negative work experiences/appraisals in investigations of work-related stress (Brief & Robertson, 1989; George, 1992; Hart, Wearing, & Headley, 1995; Watson & Slack, 1993).

While the present study, did not include a measure of dispositional PA in the research design, the factor analysis of all variables showed that NA loaded with other measures of distress (e.g., perceived stress, state anxiety, and physical health symptoms) accounting for 11.8% of explained variance in the analysis (factor 1), and the second factor, explaining 7.8% of the variance, was related to more positive affective well-being indices. The findings in the factor analysis conducted on this sample may be reflecting the influence of both NA and PA emotional constructs in the data.

Warr (1990) argued that affective well-being measures, such as organizational satisfaction, self-efficacy or "expectations of personal mastery" relate to personal competence and positive emotionality linked to psychological resources necessary to deal with experienced difficulties. Although not part of the planned test of the coping and health model under study, the above discussion suggests that positive organizational affective well-being (satisfaction and commitment) may represent an important stress resistance factor for health. Indeed, the mediating role of job satisfaction on general health outcomes has been suggested by Kelloway and Barling (1991).

The above line of reasoning raises the question of whether a dispositional tendency towards PA influences affective organizational well-being outcomes. Recently

researchers have argued that job satisfaction and affective commitment may be a function of stable personality characteristics of individuals (i.e., where some individuals are consistently more satisfied than others across time and different environmental influences) and/or stable differences in two broad factors of emotionality (i.e., NA and PA) (see Watson & Slack, 1993 for a review). While there exists no studies other than the one conducted by Watson and Slack (1993) which assess the ability of PA and NA to predict job satisfaction longitudinally, the idea that both PA and NA make independent contributions to the prediction of job satisfaction has been advanced by a number of researchers (Brief & Robertson, 1989; George, 1992; Watson et al., 1987; Watson & Pennebaker, 1989). Watson and Slack's (1993) findings indicated that both NA and PA were associated with some aspects of job satisfaction but not others (i.e., NA and PA were related to satisfaction with work and co-workers but not pay or supervision), but more importantly demonstrated that between 20% to 33% of the variance explained in job satisfaction over time was accounted for by job events (e.g., job changes) and occupational variables (e.g., quality of work) compared to 1% to 10% of the variance explained by combined indices of PA and NA. These findings suggest that while pre-existing temperament contributes to some aspects of job satisfaction, other environmental or organizational influences are more strongly associated with job satisfaction (or affective well-being outcomes) (Watson & Slack, 1993).

In line with the above research and the interactional coping model (Lazarus & Folkman, 1984, 1987), it is conceivable that aspects of job satisfaction and affective commitment (i.e., affective organizational well-being) are influenced by reciprocal and

interactional relationships among dispositional affective factors, job- and organizationally-related influences, coping resources and coping efforts. In the absence of a measure of trait PA, the relative contributions of dispositional PA to explained variance in organizational affective well-being outcomes in this downsizing sample remains unknown. In any event, the dispositional measure of NA was found to account for 6% of the variance explained in organizational affective well-being, leaving a sizable amount of the variance explained by the downsizing stress appraisal and coping variables (to be discussed shortly). These findings suggest that while NA may be an important influence on well-being outcomes, it is not the sole or most important influence. Further support for the notion that contextual factors play a significant role in organizational affective well-being outcomes comes from the recent work of Williams, Gavin and Williams (1996). These researchers tested the influence of NA, job role stress appraisals and organizational affective factors using two latent-variable modelling approaches (LISREL). They found NA to be a less important influence on job satisfaction and affective commitment than job role stress appraisal variables (Williams et al., 1996).

The Role of Downsizing Stress Appraisal (Hypothesis 2)

It was predicted that the downsizing stress appraisal variables (i.e., job insecurity and role stress) would contribute significant gains to the proportion of the variance explained in organizational and health-related outcomes after NA and the set of demographic variables had been controlled. Higher levels of job insecurity and/or higher job role stress appraisal (i.e., role conflict, ambiguity and overload) would be associated with more negative organizational and health-related consequences for individuals in a

downsizing environment (H2).

Watson et al. (1987) argue that because of strong interrelationships among the frequently used self-report measures of stress, physical and psychological symptoms, personality and emotion arising from overlapping variance with NA (i.e., with NA being the underlying construct), measurement of stressor-strain relationships are confounded. The fact that self-report tools were used exclusively in the present study, should lead Watson et al. (1987) to argue that finding support for hypothesis 2 would be unlikely (i.e., NA would capture all or most of the explained variance in outcomes). Before discussing the results of the present study concerned with hypothesis 2, it should be noted that in the selection of measures for this study, special care was taken to choose measures that did not include phrases or wording known to tap NA. For example, the measure of physical health (Cohen & Hoberman, 1983) was chosen because it was an inventory of physical health symptoms which had been developed to exclude items tapping psychological complaints. The job satisfaction measure, the JDI (Smith et al., 1969) was chosen because there is empirical evidence to suggest that it is also largely unaffected by NA (Schaubroeck et al., 1992).

Physical and Psychological Health (H2).

The results indicated that the downsizing stress appraisal variables contributed significantly and independently to explained variance in physical health and organizational outcomes after the influence of NA had been considered. This result suggests that the stress appraisal variables were accessing appraised aspects of the downsizing work situation independent of NA. Relative to the influence of the control

variables, including NA, the downsizing stress appraisal variables (i.e., job insecurity and job role stress) were found to add gains of 10% and 11% explained variance in physical health symptoms and organizational affective well being scores respectively.

In addition, these findings indicate that stress appraisals of the work environment where downsizing occurs are significantly associated with physical health symptomatology. These data are in accordance with the interactional model of coping and health (Lazarus and Folkman, 1984, 1987), which suggests that stress appraisal (or the experience of stress as expressed in stress appraisals) is linked to health. Of the stress appraisal variables, job role stress (i.e., role conflict, ambiguity, and overload) was found to have the most powerful influence on physical health outcomes relative to perceived job insecurity. Correlational analyses indicated that physical health symptom reporting was significantly associated with each of the role variables (i.e., role conflict, overload and ambiguity), and the correlation between physical health and the composite measure of job role stress was high. These findings indicate that the collective appraisals of how employees are experiencing the workplace (i.e., job role stress) are more closely associated with health outcomes than levels of job insecurity per se.

The finding that appraisals of job role variables were significantly associated with physical health outcomes is consistent with an emerging literature on job stress which suggests that elements and appraisals of work demands, such as role conflict, ambiguity, overload, low decision latitude, and monotony in the workplace are associated with illness outcomes, such as coronary heart disease (Alfredsson, Karasek, & Theorell, 1982; Cooper & Marshall, 1976; Kahn, 1974; Karasek & Theorell, 1990; Karasek, Baker,

Marxer, Ahlbom, & Theorell, 1981; Theorell, 1993), and a broad range of somatic symptoms (Cooper, Kirkcaldy, & Brown, 1994; Jackson & Schuller, 1985; Parkes, 1982).

The downsizing stress appraisal variables, job role stress (i.e., a composite measure of role conflict, ambiguity and overload) and job insecurity were found to correlate significantly with the psychological health outcome (i.e., state anxiety) used in this research. Role ambiguity and role overload, however, were found to be more significantly associated with psychological distress than role conflict. This suggests that jobs that are more ambiguous with respect to roles, responsibilities and expectations, and jobs where the demands or challenges of employment (i.e., time, resources) are greater than those perceived to exist, are associated with greater psychological distress or anxiety. It is conceivable that work-related demands that may be placed on employees in a downsizing environment (e.g., greater role demands as a function of chronic organizational change, loss of human resources, reduced clarity in job expectations owing to high turnover, job change and/or reassignment without the same level of orientation or training as that experienced prior to downsizing or restructuring, as well as, either perceived or real expectations to deliver the same quality or quantity of job deliverables) may enhance these appraisals of role ambiguity and overload.

It is also possible that job role stressors, such as ambiguity and overload, carry over into the home lives of employees confronting long term downsizing threat. While examination of reciprocal relationships among work-home strains were not part of the present research, future research concerned with the consequences of chronic stressors, such as downsizing may find such examinations fruitful. For example, there is an

emerging literature which suggests that overly demanding work demands (e.g., overtime and time away from the family) can exert negative influences on family and home roles (e.g., relationship strains, lower quality of family life, and reciprocal work-home strains) which in turn have been linked to lower job satisfaction, decreased organizational commitment, burnout, depression and a host of negative health consequences (Adams, King, & King, 1996; Bachrach, Bamberger, & Conley, 1991; Barnett, Davidson, & Marshall, 1991; Duxbury & Higgins, 1991; Higgins & Duxbury, 1992; Higgins, Duxbury, & Irving, 1992; Frone, Russell, & Cooper, 1992; Netemeyer, Boles, & McMurrian, 1996; Thomas & Ganster, 1995).

A most interesting finding concerning the role of measures of downsizing stress and psychological distress, however, came from the hierarchical regression analysis. Following control of the demographic variables and NA, the downsizing stress appraisal variables contributed less than two percent to the variance explained in psychological health outcomes. This finding may suggest that variance in psychological distress as measured by the state anxiety measure overlapped extensively with that of NA. Indeed, it is noted that the state anxiety measure was strongly correlated with the measure of NA. If this premise is a viable one, self-reports of emotional and psychological distress may well be influenced by an underlying construct, known as NA (see Watson et al., 1987).

While there is a plethora of research reports indicating relationships among job stress variables and psychological health (see Ganster & Schaubroeck, 1991 for a review), it has not been until recently that researchers have attended to the measurement and/or control of dispositional affective variables such as NA (and PA in some instances)

in stressor-strain relationships (Brief et al., 1988; Chen & Spector, 1991; Jex & Spector, 1992; Schaubroeck et al., 1992; Parkes, 1990; Watson & Slack, 1993; Williams et al., 1995). To date, while this research clearly indicates that NA plays a role in stressor-strain relationships, the evidence is equivocal with respect to the extent and magnitude of its role. Some studies suggest that NA is responsible for significantly large amounts of the variance in stressor-strain relationships (Brief et al., 1988; Schaubroeck et al., 1992); other researchers note that NA exerts a relatively small amount of explained variance between chronic job strains and emotional and somatic outcomes (Chen & Spector, 1991; Jex & Spector, 1992; Watson & Slack, 1995; Williams et al., 1996); and still further, others note that NA may moderate relationships among appraised work demands and health symptom reporting (Parks, 1990). While the present investigation made no specific hypotheses concerning the role of NA and downsizing stress appraisal (i.e., job role stress appraisal and job insecurity), the data indicated significant positive correlations between NA and each stress appraisal variable. These findings suggest that as scores on NA increased, appraisals of job-related stress likewise increased. However, supplementary analyses, which explored interaction tests of NA and each downsizing stress appraisal variable, found no significant interactions for any of the health- or organizational-related outcomes. These results suggest that both NA and downsizing stress appraisal exert significant independent negative influences on health and organizational outcomes (i.e., main effects rather than interactional effects).

The present research also suggests that NA strongly influences measures of somatic and psychological health, thus indicating that its control in stress-related studies

assessing health outcomes is not only mandatory but requisite for determining the role of a specific stressor on health distinct from that afforded NA. Further, the choice of tools used to measure health-related outcomes may influence the ability to assess health outcomes independent of the influence of NA. For example, there was considerable variability in the effect of NA in the measures used in the number of studies mentioned above. This observation would suggest that different measures of psychological and somatic health may be differentially sensitive to the influence of NA and potentially account for variable influence of NA in stressor-strain relationships. In this study attention was paid to employ outcome measures documented to be less sensitive to the influence of NA. Despite such an approach, 25% of the variance in physical health outcomes was explained by the influence of NA. However, once NA's influence had been determined, significant gains in explained variance for physical health were found to be related to the downsizing stress appraisal variables, specifically job role stress. This finding lends support to the notion that negative job-related stressors are linked to physical health outcomes and are not merely a reflection of the influence of NA as others have argued (e.g., Ganster & Schaubroeck, 1991).

Organizational Affective Well-Being (H2).

After controlling for demographic variables and NA, downsizing stress (i.e., job role stress appraisal and job insecurity) contributed a further 11% in variance explained in organizational affective well-being scores. Contrary to the results of the regression analysis on physical health outcomes, which suggested that job-related role variables influenced physical health outcomes more so than job insecurity, the job insecurity

measure was found to be more significantly associated with organizational affective well-being than job role stress appraisals. Employees with lower scores on downsizing stress appraisal measures, most notably job insecurity, were found to report more positive organizational affective well-being. This finding would likewise indicate that employees with higher job insecurity were less satisfied or less affectively attached to the organization. A recent study of downsizing stress in samples across Canada found morale, trust and job satisfaction to be very low among federal government employees nationally (Armstrong-Stassen, 1997). Conceivably, lower job satisfaction and affective commitment to the organization owing to job insecurity may result in lower morale and trust in the workplace, and more negative work interactions among employees, leading to higher job role stress.

Interestingly, role ambiguity was as strongly associated with organizational affective well-being as job insecurity, suggesting that measures of job insecurity and role ambiguity may be related since both constructs assess aspects of uncertainty. The correlation between job insecurity and role ambiguity was found to be $r = .19, p < .01$ suggesting a significant association between these two measures, but not as strong as one would expect with redundancy. The other job role variables, which made up the composite job role stress appraisal measure, were less strongly related to organizational affective well-being. For example, a weaker, although significant negative correlation was found for role conflict and organizational well-being. Role overload was not found to be significantly related to this outcome.

Recent research suggests that the extent to which role overload influences

affective organizational outcomes (e.g., job satisfaction) varies with other contextual and person factors such as job category (Bhalla et al., 1991; Ferguson & Cheyne, 1995) and job involvement or the psychological importance attached to the job (Frone, Russell, & Cooper, 1995). For example, role overload has been found to be associated with lower job satisfaction at higher versus lower occupational levels (Ferguson & Cheyne, 1995) and at higher levels of job involvement (Frone et al., 1995). In addition, more negative health consequences for elevations in work demands have been noted for those holding higher levels of importance in their job role (Frone et al., 1995), as well as for those with lower levels of decision latitude and job control (Wall, Jackson, Mullarky, & Parker, 1996).

In summary, the results of the present study discussed so far suggest that the measure used to assess organizational affective well-being was less influenced by NA than either the state anxiety measure used for assessing psychological health or the physical health symptom scale. Appraisals of work-related stress were found to be significantly associated with physical health outcomes and organizational well-being after the influence of NA had been removed from the analyses. Hypothesis 2 was supported in this study for the physical health and organizational affective well-being outcomes. These findings are in keeping with recent research exploring the role of NA and the influence of job-related factors in organizationally relevant outcomes (Cropanzano, James, & Konovsky, 1993; Watson & Slack, 1995; Williams et al., 1996).

Perceived Organizational Control (PC) and Perceived Organizational Support (POS)(Hypothesis 3)

Hypothesis 3 (H3) suggested that the organizational coping variables, perceived organizational control (PC) and perceived organizational support (POS), would add further incremental gains in explained variance for health- and organizational-related outcomes. Correlational analyses indicated significant associations among both POS and perceived organizational control (PC) and the health- and organizational-related outcomes in that POS and PC were found to correlate negatively and moderately with both psychological distress (state anxiety) and physical health symptoms and strongly and positively with organizational affective well-being. Of interest, both POS and PC were also found to correlate negatively and significantly with job role stress appraisal and job insecurity, suggesting that higher POS and/or higher PC was associated with lower levels of job role stress appraisal and less perceived job insecurity.

Psychological and Physical Health (H3).

These two coping resources (POS and PC), however, were found not to add significantly to explained variance in psychological and physical health outcomes in hierarchical regression analyses after the influence of the demographic variables, NA, and downsizing stress appraisals had been considered. These findings are in sharp contrast to a larger body of literature which suggests that perceived support and control exert a health protective (or stress resistance) influence in the face of different environmental stressors (Alfredsson & Theorell, 1983; Antonovsky, 1987; Ashford, 1988; Bandura, 1986; Bandura et al., 1988; Bowman & Sterns, 1995; Eisenberger et al., 1986, 1990;

Ganster et al., 1986; Jones et al., 1995; Karasek et al., 1981; Kobassa, 1979; Kobassa & Puccetti, 1983; Holahan & Moos, 1990; LaRocco et al., 1980; Lazarus, 1991; Miller, 1992; Ouellette, 1993; Scheier & Carver, 1985, 1987; Steptoe, 1989; Taylor, 1995; Wall et al., 1996).

A number of possible explanations for why neither POS nor PC were found to have an influence on health outcomes are proposed. First, it may be that the global measure of POS was not an adequate measure of perceived support for employees confronting the threat of such a complex, chronic, long term stressor such as organizational downsizing. Conceivably, it is not perceptions of support from the organization, but support arising from other sources, such as from supervisors, peers, and/or family which function to dampen the negative health consequences of this stressor. Indeed, the literature on social support suggests that social support is a complex phenomena which varies in its usefulness as an influence on health, affective and psychological distress in the face of stressors along a number of interrelated factors (e.g., the type, source, amount, timing, availability as well as perceived availability, the nature of support, individual differences with respect to need for support, whether or not the actual support is received, as well as the type of stressor confronting the individual) (Ganster et al., 1986; Taylor, 1995). Social support has also been found to aggravate or worsen the effects of stressors on strains (Ganster et al., 1986; Taylor, 1995). Recent reviewers (Beehr & McGrath, 1992) and research (Adams, King, & King, 1996; Walsh & Jackson, 1995) suggest that social support from members of the work community, as well as the family, exert beneficial effects on employees' well-being and health. It is

conceivable that assessments of social support from superiors, peers and family may have proven to be an important inclusion in this research concerned with the effects of this chronic stressor on health-related outcomes.

An interesting aside, however, concerns the coping response variable "emotional discharge" or sharing worries regarding downsizing and restructuring with others which could be roughly construed as a coping attempt to seek social support through catharsis. Although the present investigation made no specific hypotheses concerning the coping variable emotional discharge the results of this study found this variable to be unrelated to health outcomes. Emotional discharge coping, however, was found to be significantly negatively correlated with job role stress appraisal suggesting that coping by sharing one's worries and concerns about downsizing/restructuring was associated with lower appraisals of role stress at work. Ashford (1988) found emotional discharge coping to buffer stress in an organization prior to and during the early phases of organizational change. In the present study, however, supplementary analyses which explored interaction tests of emotional discharge coping and the downsizing stress variables (i.e., job insecurity and job role stress appraisal) found no significant interactions across the health and organizational outcomes.

An additional explanation for the failure to find significant explained variance for POS in health outcomes in the present study may be that unsupportive interactions at work, which contributed to the variance in appraisals of job role stress in the organization, interfered with perceptions of organizational support, dampened its influence and/or worsened its impact (Taylor, 1995). The finding that downsizing stress

appraisals, specifically job role stress, captured significantly large amounts of the explained variance in health-related outcomes when entered into the regression analyses before POS would not be surprising (i.e., negative unsupportive interactions at work may have elevated job role stress appraisal). Indeed, a recent study of downsizing stress found POS to be a significant predictor of job role stress appraisals (Donaldson, 1996).

Alternatively, it may be that the POS measure was an appropriate measure of support but perceived support in the downsizing environment was sufficiently low across the entire sample as not to be a statistically significant discriminator on the measures of health outcomes (i.e., the problem of truncated range). POS, however, was found to be a significant predictor of other outcomes (e.g., organizational affective well-being) and was found to be significantly associated with a number of study variables. Comparisons of statistics from other research to the means and standard deviations found in this study indicated that the average means (and SDs) for POS published in past nondownsizing organizational studies of job stress were found to be marginally higher (i.e., means from 35.81 to 36.97, and SDs from 7.96 to 9.39) (Eisenberger et al., 1986, 1990) as compared to those found in this study (i.e., mean = 33.46, SD=10.43).

Also, the average level of perceived control was much lower in the current sample than in previously published statistics (i.e., mean = 9.0, SD =2.6 in the norm sample, as compared to a mean of 5.89 and a SD of 1.81 in this study). This observation suggests that a lower level of and variability in PC for the entire sample may have interfered with the ability of this study to detect significant effects for perceived control on health outcomes. At the same time, a lower mean than average suggests that employees in this

downsizing organization may be at greater risk for stress and strain owing to the absence of or lower levels of previously identified important coping resources such as perceived control and support. A recently released report on preliminary findings from a larger scale longitudinal study of downsizing stress, sampling across Canada, also indicated that lower than expected levels of perceived support, trust and morale was found for employees in downsizing federal government environments (Armstrong-Stassen, 1997). These data suggest that downsizing environments may be depriving employees of important coping resources, such as perceived support and control.

Organizational Affective Well-Being (H3).

Contrary to the findings for these coping resources in health outcomes, POS and PC were found to contribute gains of 19% in explained variance in organizational affective well-being scores after the demographic control variables, NA, and the downsizing stress appraisal variables had been considered in the regression. POS was found to be the stronger contributor to variance explained as compared to PC. This finding indicates that POS exerts a significant independent influence on organizational affective outcomes beyond that of downsizing stress appraisal. Employees who believe that the organization supports their contributions, values their well-being, and will provide support and help when needed (Eisenberger et al., 1986, 1990), were found to be more likely to be positively attached to and satisfied with the organization (i.e., have higher organizational affective well-being) than those lower on perceived organizational support. While the finding of a direct (or main) effect for POS with organizational outcomes such as affective commitment and job satisfaction is in keeping with the results

of a number of organizational studies. POS has also been found to be a powerful predictor of other positive organizational behaviours, such as conscientiousness, innovation, and citizenship behaviour (i.e., freely engaging in extrarole helpful behaviours to enhance organizational functioning) (Eisenberger et al., 1986, 1990; Jones et al., 1995; Setton, Bennett, & Liden, 1996; Shore & Wayne, 1993).

Jones et al. (1995), using a model testing approach (LISREL) to test for the mediating and moderating influences of POS, found POS to exert a mediating rather than a moderating influence on stress-strain relationships in the workplace. This observation would suggest that irrespective of levels of stress, higher POS will have a positive influence on organizationally relevant outcomes, such as job satisfaction and affective commitment. Jones et al. (1995), however, suggest that POS, rather than being a measure of social support (i.e., as associated with internal networks within organizations), is more closely connected conceptually to a measure of organizational culture. Organizational culture is a global term typically describing the collective experiences of employees within a specific organizational environment (Jewell & Seigal, 1990) and has been posited to be influenced by a multiplicity of factors, one of which concerns individuals' beliefs about sources of support within the organization (DeFleur et al., 1993; Littlejohn, 1996). As such, organizational culture may be a reflection of the appraised levels of support employees feel from the organization. When support is sufficiently low, a negative culture may emerge (and vice versa). For instance, Eisenberger et al. (1986) equate POS to an attributional process whereby individuals derive meaning of social relationships within the organization concerning support similar to that used to infer

support from social settings. They suggest that the sources of attributions or underlying beliefs about the nature and meaning of support arise from, and are influenced by, the frequency, sincerity and perceived legitimacy of formal and informal messages employees receive about the organization's commitment to ensuring employees' well-being. This hypothesis suggests an implied belief that organizational support will be available from a wide variety of sources: for example in sickness and emotional need programs or aid will be available, as well as financial rewards, acceptance and personal regard for valued contributions will be present. These implied beliefs concerning organizational support are an important aspect of the construct POS (Eisenberger et al., 1986). While it is argued that perceptions concerning support from the organization may also reflect culture (or at least one facet of culture), the value of POS in explaining variance in organizational affective well-being is not only demonstrated in this study, but also support those of Jones et al., (1995) and a number of other organizational researchers (e.g., Eisenberger et al., 1986, 1990; Setton et al., 1996; Shore & Wayne, 1993).

Health Behaviours and Coping Responses (Hypothesis 4)

Hypothesis 4 (H4) states that personal coping variables (i.e., health behaviours, and the set of coping responses) will also contribute to explained variance for organizational and health outcomes. Positive health behaviours and coping characterized by information seeking, cognitive redefinition, emotional discharge, and self-efficacy will be associated with more adaptational outcomes.

Psychological and Physical Health (H4).

Hypothesis 4 was not supported through regression analyses for the psychological and health outcomes. Indeed, correlational analyses reflected few significant correlations among the coping response variables, with the exceptions that self-efficacy beliefs specific to the downsizing/restructuring were found to be significantly related to psychological and physical health, and preventive health behaviours and cognitive redefinition were significantly associated with psychological health (state anxiety). These correlations indicated that employees who had higher self-efficacy beliefs regarding their ability to handle or cope with the downsizing and restructuring threat reported fewer symptoms of psychological and physical distress. Those individuals with higher scores for cognitive redefinition (i.e., who perceived downsizing and restructuring in a positive fashion as an opportunity) reported better psychological health. The reporting of more preventive health behaviours (e.g., exercising) was related to lower psychological distress. Comparisons of the norms for preventive health behaviours to the sample statistics, however, indicated that the average number of preventive health behaviours engaged in by employees in this downsizing environment was considerably lower than in the norm sample (see Appendix N). Whether fewer health behaviours were a response to, or a consequence of downsizing stress is unclear in this data set. Still, the data do suggest that more positive health behaviours were associated with better psychological health.

Recent research suggests that positive health behaviours, such as regular physical activity through exercise, have been linked to positive psychological health, better mood

states, lower stress appraisal, higher job satisfaction, as well as an important aspect of disease prevention (e.g., coronary heart disease) (Chandrashekhkar, 1991; Gamble, Boreham, & Stevens, 1993; Gronningsaeter, Christensen, Larsen, & Ursin, 1991; Daley & Parfitt, 1996; Stone, Rothstein, & Shoenhair, 1991). Coping variables such as positive health behaviours, self-efficacy, and cognitive redefinition have been identified as adaptive coping functions that have been shown to influence stress appraisal and to be associated with psychological and physical well-being (Ashford, 1988; Bandura et al., 1988; Carver & Scheier, 1994; Daley & Parfitt, 1996; Smith & Wallston, 1992; Steffy et al., 1990; Taylor, 1995; Ziff et al., 1995).

The regression analyses, however, showed that the sets of coping variables did not add significantly to explained variance in psychological and physical outcomes. This observation suggests that while some adaptive coping was occurring that was associated with some aspects of health, the impact of the coping variables on health outcomes was found to be minimal relative to job role stress (i.e., role conflict, ambiguity, and overload). Indeed, the set of coping variables contributed at most 2% to variance explained on health outcomes in the last stages of the regression.

The results concerning the influence of coping resources and responses on health outcomes suggest that coping did not have a direct influence on health outcomes after the influence of stress appraisal had been considered. It is conceivable, in light of findings that suggest exercise exerts a beneficial influence on mood states, stress appraisal and health (e.g., Daley & Parfitt, 1996), that variance explained in health outcomes in the present study may have been captured by the stress-appraisal and affectivity indices via

the joint influence of mood states (e.g., possibly a higher incidence of negative mood) and a lower incidence of positive health behaviours overall in this sample. If this was the case, future research is warranted to help unravel the possible complex inter-relationships that may exist among stress appraisal, affectivity and/or mood, coping factors and health.

It is also conceivable that downsizing stress may have been so pervasive and diverse (i.e., encompassing multiple stressors) that it interfered with successful individual attempts at coping. The situational demands of organizational downsizing (e.g., chronic change, insecurity, job demands), the long duration of the threat (e.g., spanning three years), as well as the intensity of the threat (i.e., the largest downsizing initiative in the history of the federal government) may have interfered with successful attempts to employ individual coping styles, efforts or strategies. Further, it may be that the measurement of individual coping responses did not capture the complex nature of coping that may be occurring in downsizing organizations.

The coping and health model (Lazarus & Folkman, 1984, 1987) suggests that cognitive processes (i.e., primary and secondary appraisals) and coping resources and responses influence the adaptive nature of coping and health outcomes. This model suggests two routes through which coping influences health: (1) coping resources and responses operate through their influence on primary and secondary appraisal of the stressor, and (2) coping resources and responses affect health through differential responses to stress (Clark & Watson, 1991). In the present study, direct tests of the influence of coping variables on stress appraisal (e.g., job role stress) were not part of the planned analyses. However, supplementary regression analyses with job role stress as the

dependent variable and the coping variables considered after the set of demographic variables and NA indicated a significant main effect for POS on stress appraisal. No other coping variable influenced the above noted analyses.

Concerning the tests for the main (direct) effects of coping on health-related outcomes indicated that stress appraisals concerning the nature of the work and the environment appeared to be more powerful predictors of psychological and physical health than any specific coping resources or coping responses. These data suggest that for these government employees in a downsizing environment, the negative influences on health of stress experienced through job role stress (i.e., role conflict, ambiguity, and overload) may potentially exceed any protective function afforded by coping resources and responses. It is also noted that coping resources, most notably POS, exerted an indirect influence on health through its influence on stress appraisal.

For organizations interested in health promotion and protection, the findings from this present study suggest that interventions aimed at alleviating job stress experienced as role conflict, overload and/ or ambiguity may be helpful. Interventions which promote the strengthening of coping resources, such as building self efficacy or perceived control, promoting or providing social support, and the promotion of adaptive health behaviours may also prove beneficial for stress resistance and health protection. Organizational initiatives which aim at providing opportunities for employees, (e.g., through advancement, training, financial assistance, career counselling and employment/ retirement assistance in the face of downsizing threat) may also help to promote optimism in the future work place (i.e., by allowing for positive cognitive redefinition).

Organizational Affective Well-Being (H4).

The coping variables entered at the last block of the hierarchical regression analysis were found to contribute significantly to 6 % further gains of explained variance for organizational affective well-being outcomes. Coping related to information seeking accounted for significant amounts of the variance, with coping through cognitive redefinition (i.e., viewing downsizing and restructuring as an opportunity) and engaging in preventive health behaviours (e.g., exercising) approaching an acceptable level of significance. These results suggest that coping by seeking information about the specific nature of downsizing and restructuring offered significant gains in variance explained in outcomes above those afforded by POS (which had been considered earlier in the analysis). This form of coping may have been helpful in reducing uncertainty and/ or furnishing information concerning the threat (i.e., increase predictability) (Ashford, 1988) and fostering positive organizational affective well-being (i.e., job satisfaction and affective commitment). The fact that information-seeking coping achieved significance in the final block of the analysis suggests that this form of coping may be salient in ensuring or promoting positive affective organizational links. In turn, information seeking may assist adaptive functioning within organizational settings undergoing downsizing and change.

Of particular note, theoretical interest in the relative influences on outcomes for coping constructs directed towards and away from the stressor (i.e., information seeking versus cognitive avoidance) was an influential force in the development and design of this research. While it was assumed that these coping constructs could be adequately

represented and tested using more global and dispositional measures of coping styles (i.e., the monitoring and blunting scales, MBSS). It is interesting that the more molecular or stressor-specific coping response measure (i.e., information seeking specific to downsizing and restructuring) proved to be a significant predictor of organizational affective well-being in the final stages of the regression. This finding has important theoretical relevance to the study of particular stressors and suggests that tests of more specific coping responses may be more fruitful than global coping styles. However, this claim is made with caution as the global measure of monitoring and blunting coping styles (MBSS) evidenced heterogeneity of constructs and weak reliability in this study. It may have been that it was the particular measure of coping style that was chosen for this study that limited finding any significant influence for an attentional or information seeking coping style, rather than the notion of this type of dispositional coping style *per se*.

It is also noted that information-seeking coping made a small but significant contribution to explained variance in organizational affective outcomes thus suggesting some caution in its interpretation. The coping literature specific to chronic, longer term stressors, however indicates that active, problem-focused coping (or coping directed towards the stressor) has been consistently associated with more positive outcomes relative to avoidant coping (e.g., Armstrong-Stassen, 1994; Parkes, 1990; Suls & Fletcher, 1985; Taylor, 1995). Indeed, this was the finding in this study for organizational affective well-being.

Lazarus, in his 1991 book, Emotion and Adaptation, presents compelling arguments for the possible influence of negative and positive emotions (or mood states) in stress appraisal and coping. More recently, research is beginning to attend to the role of positive and negative mood states on stress appraisal and organizational and health-related outcomes (e.g., George & Jones, 1996; Hart et al., 1995). To date, this research suggests that positive mood is reciprocally related to lower stress appraisal, adaptive coping and positive affective well-being whereas negative mood is associated with higher stress appraisal, maladaptive coping and negative affective well-being and illness. It is conceivable that active coping through information seeking influenced positive mood (or vice versa) and in turn this was expressed through job satisfaction and affective commitment to the organization. It is noted that information-seeking coping did not emerge as an influence in the previous regression analyses concerned with physical and psychological health because the stress appraisal variables and NA captured the bulk of the explained variance before the coping variables were considered. It is conceivable, however, that this occurred as a function of negative mood states generated by stress appraisal. Neither positive nor negative mood states beyond those of state anxiety were measured in this study, nor were the causal directions between mood states, stress appraisal, coping and affective well-being tested, but exploration of these issues may provide fruitful avenues for future research.

The findings of this study, however, support the efficacy of information-seeking or active coping in positive affective outcomes. Cognitive avoidance or distracting one's attention away from the stressor was found to be unrelated to health and organizational

outcomes in this downsizing sample.

Tests of Specific Main and Interaction Effects (H5)

Although the main effects of the coping resource and response variables have generally been tested in H3 and H4, specific hypotheses concerning their main and interaction effects were made for perceived control and self-efficacy, POS, and health behaviours. Each specific hypothesis will be considered in turn.

- (a) It was hypothesized that perceived control or self-efficacy would interact with stress appraisal to influence the adaptive nature of health-related outcomes. No significant interaction effects were found. Neither perceived control nor self-efficacy variables interacted with stress appraisal to influence outcomes. This result suggests that perceived control and positive self-efficacy are associated with better health outcomes and positive organizational well-being irrespective of the level of appraised stress.
- (b) The hypothesized interaction between levels of stress appraisal and POS was nonsignificant and failed to support hypothesis 5 (b). Higher POS had a beneficial effect on organizational affective well-being irrespective of level of appraised stress.
- (c) A main effects hypothesis was made for positive health behaviours on all the outcomes measures and was not supported in the regression analyses. However, positive health behaviours were found to correlate significantly and negatively only with psychological distress. It has been noted that mean levels of positive health behaviours in this sample were found to be well below those in other samples (Vickers et al., 1990).

Tests of the Main and Interactive Effects of Coping Style -- Monitoring & Blunting (H6)

A number of tentative hypotheses concerning the effects of high monitoring and a lower monitoring (blunting) coping style were made (H6 (a) through (e)), however no effects for monitoring were found in the present study.

The possession of dispositional tendencies towards either a monitoring or a blunting coping style were not found to be significantly related to health outcomes. Monitoring and blunting coping styles were also not found to be significantly related to downsizing stress appraisal (i.e., job insecurity or job role stress). These results suggest that monitoring and blunting coping styles exerted neither a direct nor an interactive influence on physical and psychological health, or on organizational affective well-being. Of particular interest was the failure to detect interactive effects between perceived control or self efficacy and monitoring (or blunting) coping styles. This finding is contrary to a large body of research conducted by Miller and her associates (Miller, 1987, 1990, 1992, 1993; Miller & Birnbaum, 1988, 1989) that suggests that the adaptive nature of these coping styles is influenced by control contingencies. In effect, when control is high, high monitoring/low blunting have been found to be more adaptive than a low monitoring/high blunting style. In contrast, when control is low a high blunting/low monitoring style has been found to relate to more adaptive outcomes (Miller, 1987, 1990).

The failure of these coping styles significantly to influence health outcomes may conceivably relate to the following alternative explanations: (1) dispositional coping styles are relatively inert in the face of a long term stress such as organizational

downsizing; (2) the measurement tool used to assess coping style was inadequate and/ or did not generalize to the organizational setting; and (3) coping styles are not related to health outcomes and/or organizational affective well-being. It is conceivable that the measurement of constructs such as coping style may be less sensitive to the specific nature of coping occurring in the downsizing environment and thus fail to account for coping differences in the health outcomes. The complex demands placed on individuals owing to the downsizing stressor (i.e., the long term temporal span of the threat) and its relative impacts on individuals (e.g., threat of job loss), as well as a multitude of influences within the organizational setting (e.g., job demands) suggest that it would be unlikely that dispositional tendencies towards either a monitoring or blunting style could be maintained in the face of such a stressor. A complex array of different coping responses specific to the downsizing/restructuring may be more helpful for adaptive coping to occur. Recall, one specific coping response variable, information seeking about downsizing and restructuring proved to be a significant contributor to variance explained in organizational affective well-being in the final stages of the regression.

In terms of the adequacy of the measurement tool used to assess coping style (i.e., MBSS), the present study found the alpha co-efficients for the monitoring/blunting scales to be weaker than in published reports, suggesting that the reliability and validity of the tool may be unstable in samples outside those for which the measure was developed (i.e., English medical and clinic samples). As this research was the first known attempt to use this coping measure on an organizational sample, and owing to the relatively weak reliability co-efficients for the MBSS found in this study, an exploratory Principal

Component Analysis was conducted as a supplementary analysis. This analysis was conducted to investigate the factor structure and dimensionality of this coping style measure (Cortina, 1993). Principal Components Analysis of the MBSS items found the 32 items reduced to 13 factors when only two factors were expected (i.e., attention directed towards and away from the stressor). Factors found to have eigenvalues of 2 or greater accounted for only 16.8% of the explained variance. These findings suggest that the MBSS, like many other coping scales, suffers from heterogeneity in constructs (Carver et al., 1989; Heppner et al., 1995).

The results of the present study also suggested that dispositional monitoring and blunting coping styles were not related to health outcomes in this downsizing sample. However, given the paucity of previous organizational downsizing research on coping styles and the psychometric problems of the MBSS noted in the present study, the role of dispositional coping styles in health outcomes for individuals confronting the threat of downsizing remains unclear.

Demographic Variables

The present study made no specific hypotheses concerning the relationships that may exist among demographic factors, downsizing stress and health. There exists, however, a large body of research concerned with gender differences, and a range of individual differences factors (e.g., sex roles, marital status) in stress and health relationships (Barnett, Davidson, & Marshall, 1991; Baruch, Biener, & Barnett, 1987; Baum & Grunberg, 1991; Billings & Moos, 1982; Clarke, 1983; Costa & McCrae, 1985; Duxbury & Higgins, 1991; Higgins, Duxbury & Irving, 1992; Kline & Goldenberg, 1994;

Leana & Feldman, 1991; Phillips & Little, 1993; Phillips, Little, & Goodine, 1995; Taylor, 1995; Wiersma, 1990). With this literature in mind, statistical relationships among a broad range of demographic variables and the measured variables were explored in this study.

The demographic variables, age, gender, employment status, time employed (i.e., tenure), job category, education, marital status, and first language were found to be unrelated to psychological and physical health outcomes in the present study. The range of demographic variables were likewise found to be unrelated to job role stress appraisal and the coping variables, excepting perceived organizational control (PC). Higher PC was significantly related to higher job category and full-time employment status. This indicates that the higher one is in the organizational hierarchy, the more likely one is to also hold higher levels of perceived control. Higher job insecurity was also found to be significantly associated with shorter employment tenure among full-time employees in lower job categories (see Appendix M.01).

A significant positive association between job category/ level and organizational affective well-being was also found. This suggests that better affective well-being was associated with holding a higher position in the organizational hierarchy. It appears that higher job classifications are related to more perceptions of perceived control and lower job insecurity in the present sample. Alternatively, higher levels of job insecurity were significantly associated with lower perceptions of control in the lower levels of the organizational hierarchy. Organizational affective well-being was significantly lower in the lower levels of the organizational structure (i.e., lower job category). This suggests a

differential risk for job insecurity and affective well-being as a function of structural job level. Past organizational research has consistently noted job satisfaction differences among job levels and categories (Miles, Patrick & King, 1996). Lower job level has been found to be related to lower job satisfaction, whereas supervisory and management levels are associated with higher organizational affective well-being (Miles et al., 1996). Indeed, structural position in the organization may prove to be a more important factor in organizational outcomes than the standard demographic variables such as age, gender, education and marital status.

Recall, however, the set of control variables considered first in the regression analyses made no significant contributions to psychological and physical health outcomes in the present study. Job category was the only demographic variable to explain variance in organizational affective well-being outcomes but the relative influence in R^2 terms was found to be equal to or smaller than those afforded the host of factors considered later in the analysis (i.e., 7% relative to gains of 6%, 11%, 19% and 6% by the NA, downsizing stress appraisal, organizational coping and personal coping variables respectively).

Summary and Conclusions

The results of the present investigation contribute in several ways to the literatures in health and organizational psychology concerned with stress, coping and health outcomes. First, this study is only known organizational downsizing study to measure and control for the influence of a well-known "nuisance variable", Negative Affectivity (NA) (Watson et al., 1987). Negative Affectivity was found to be the single most powerful predictor of physical and psychological health reports but to be less of an

influential contributor to explained variance in organizational affective well-being outcomes. The results of the present investigation of downsizing stress and health suggests that measurement of (and control for) NA is a necessary requisite for all future studies concerned with stressors and health.

Second, the present study represents the first known research attempt to assess the effects of downsizing on health. The results of the present study indicate that after controlling for the influence of demographic variables and NA, significant proportions of explained variance in physical health symptom reporting and organizational affective well-being were found for the downsizing stress appraisal variables. In particular, job role stress appraisal variables (i.e., role conflict, ambiguity, and overload) accounted for the largest amount of variance in physical health scores, whereas, both job role stress appraisal and job insecurity significantly affected organizational affective well-being.

Third, the present study explored the direct and interactive effects of a number of coping resources and responses on health and organizational outcomes. Coping resources, such as Perceived Organizational Support (POS) and coping by seeking information about the specifics of downsizing and restructuring, were found to demonstrate significant and independent direct effects on organizational affective well-being.

Fourth, this was the first examination of dispositional coping styles (i.e., monitoring and blunting) in an organizational setting. While the present study detected notable weaknesses in the psychometrics of the tool used to assess these coping styles, dispositional coping styles were not found to be related to health or organizational

outcomes.

Research Implications.

For organizational and health researchers, the present investigation provides a preliminary look into the health and organizational well-being effects of a long term chronic stressor (i.e., organizational downsizing) that are independent of NA. Future research is needed to explore in more detail the health impacts of chronic stressors, such as downsizing using different downsizing samples as well as different long term temporal stressors. As this study employed a one time cross-sectional design, future research is needed which explores the health effects of chronic stressors, such as downsizing in longitudinal designs.

The finding in the present study that negative work-related demands (i.e., role stress) had more effects on physical health symptom reporting than job insecurity per se also suggests that future researchers exploring the effects of downsizing need to expand their theoretical focus beyond that of job insecurity to also include the appraised and/or objective contextual qualities of the work environment in which downsizing occurs. As well as the findings of the present study, a recent interview survey of downsized individuals in western Canada suggests that distress concerning job insecurity was minimal relative to the stress experienced in jobs where "doing more with less" predominated the work environment and/or where large scale mergers had occurred (Goldenberg & Kline, 1997). It is also noted, however, that two-thirds of their sample reported that families and friends had remained supportive over the course of their downsizing and subsequent unemployment (Goldenberg & Kline, 1997). This suggests

that social support may have mitigated the impact of downsizing stress and job loss but this was not tested in the Goldenberg and Kline (1997) research design.

In any event, the results of the present study suggest that appraised job role stressors significantly influenced health symptom reporting independent of NA. A broader range of factors was found to significantly influence organizational affective well-being. They included: job role stress appraisal, job insecurity, perceived organizational support (POS), and information-seeking coping specific to downsizing and restructuring independent of the influence of NA.

Health (and illness) is a multifaceted phenomenon (Baum & Grunberg, 1991) and variability in its concept may arise out of viewing it as a self-perceived, clinically diagnosed, and/or biochemical or laboratory-measured phenomenon (Clarke, 1983). In order to truly understand the health consequences of job stressors, such as organizational downsizing and reciprocal relationships among the range of person-environmental factors that may impact health, future researchers need to include health measures beyond those of self-reported psychological and physical symptoms. More clinically-derived measures of health status as well as objective indicators of health are needed in future explorations of the effects of chronic stressors, such as downsizing. In addition, variability among perceived, clinical, and biochemical markers of health should be explored in greater detail in future research (Baum & Grunberg, 1991).

Further, research that also includes objective measures of health may also help clarify the role of Negative Affectivity (NA) in health reporting and outcomes (Spector, 1987; Watson & Pennebaker, 1989; Watson et al., 1987). The use of more objective

measures of health (e.g., biochemical and physiological measures, physicians records) may also help clarify whether methodological problems, for example common method variance, truly bias self-reports of job stressors and health.

While common method variance is a frequently cited problem for organizational studies of job stress using self-report measures, recent work by Spector (1992) suggests that the self-report method is less influenced by method effects than previously believed to be the case. His comprehensive review and meta-analytic analyses of the available job stress literature suggests that there is "little evidence that observed relations are attributable to the self-report method" (p. 143) but there is considerable laboratory and field research evidence to suggest that perceptual measures of job conditions reflect the objective work environment (Spector, 1992). His analyses, however, suggest that perceptual measures of the job environment are also influenced by attitudes, cognitive processes, moods, and dispositions (Spector, 1992). While these are encouraging findings to the extent that method biases in self-report research designs may be less of a problem than previously suspected, they also reinforce the belief that complex inter-relationships among a number of person-environment variables influence stress appraisal, coping and affective and physical health in line with the theoretical model that guided the present research (Lazarus & Folkman, 1984, 1987).

The present study did not test for reciprocal multivariate path relationships among personality, downsizing stress appraisal, coping factors and health. A number of directional and bidirectional hypotheses among a number of theoretically important person-environmental factors may have influenced organizational (and health-related)

outcomes (e.g., job satisfaction influences stress appraisal versus stress appraisal influences job satisfaction). According to some, statistical tests of the above directional concerns are best handled by multivariate structural equation methods (e.g., LISREL) (Baron & Kenny, 1986; James & Brett, 1984; Kenny & Judd, 1984; Munz, Huelsman, Konold & McKinney, 1996; Williams & Anderson, 1994; Williams et al., 1996). Indeed, many organizational methodologist are now calling for the use of these sophisticated statistical methods to test complex theoretical models of job stress and health against observed data (e.g., LISREL structural equation modelling) (Munz et al., 1996; Stone-Romero, Weaver, & Glenar, 1995; Williams & Anderson, 1994; Williams et al., 1996).

Brannick (1995), however, cautions that these covariance structure model testing methods (i.e., also known as causal modelling or causal analysis) do not provide proof of causality, are sensitive to a number of biasing influences (e.g., sample size), and thus should be used only when "something of substance will be learned that would not have been learned with simpler methods" (p. 210). Brannick (1995) suggests that one appropriate use of covariance structure model methods is to use it after regression or correlational methods have been used as a means of validating and checking the integrity of one's findings. This suggests that one means of validating the results of the present study would be to explore them using these structural equation modelling approaches. Further, these covariance structural equation methods provide a means of testing directional multivariate paths among measured variables and provide a better test of mediating and moderating influences (Baron & Kenny, 1986; James & Brett, 1984;

Williams et al., 1996). Research questions and theoretical hypotheses concerning the possible directional paths of the factors found to be significantly related to health and organizational outcomes could (and should) be explored in greater detail in future research. For example, multivariate directional paths among coping variables such as POS, stress appraisal variables, organizational affective indices, and NA could be explored for their possible interrelationships and reciprocal influences.

The present research, using a set number of person-environment variables accounted for 40% to 57% of the explained variance in health and organizational outcomes. While these findings are impressive, they also indicate that a sizable amount of the variance in outcomes remains unexplained. Candidates for theoretically-relevant variables that may be responsible for the above noted unexplained variance and which were not measured in the present study, may include Positive Affectivity (PA), a broader base of positive and negative mood states or emotions (Cropanzano et al., 1993; Hart et al., 1995; George, 1992; George & Jones, 1996; Williams et al., 1996), reciprocal relationships among other work and non-work related role variables (e.g., home stressors) (Adams et al., 1996; Baruch et al., 1987; Barnett et al., 1992; Barnett & Marshall, 1993; Cook & Rousseau, 1984; Duxbury & Higgins, 1991; Frone et al., 1992; Higgins et al., 1992; Munz et al., 1996; Netemeyer et al., 1996), and a range of social support sources, including workplace support from peers, subordinates and superiors, as well as the home (i.e., family or partner support) (Adams et al., 1996; Taylor, 1995; Walsh & Jackson, 1995).

Given the recent empirical and theoretical interest in reciprocal roles played by

NA and PA, as well as negative and positive mood states in job-related stress appraisal. inclusion of these trait and state measures in future research designs of job stress and health may prove to be fruitful. In addition, the emerging body of research dealing with the interplay between work and family roles, stress appraisal, social support and health (e.g., Adams et al., 1996; Barnett et al., 1991; Walsh & Jackson, 1995) suggests that future investigations of organizational downsizing stress also include consideration of non-job related reciprocal influences on health outcomes. For example, these may include relationships among work-home conflict, as well as home-work conflict (Netemeyer et al., 1996) and organizational and health outcomes.

Baum and Grunberg (1991) comment: "If we overlay differences in stress response, appraisal, use of psychosocial assets, and the like, we can begin to appreciate the great complexity of health-behaviour relationships" (p. 84).

Organizational Implications.

For managers and senior executives in downsizing settings, the results of the present study suggest that employees are at greater health risks when jobs are experienced as conflictual, ambiguous, and overly demanding. Organizational interventions aimed at correcting (or preventing) negative job demands in downsizing environments appear to be warranted. Organizations that provide timely and useful information concerning organizational changes and that foster a higher sense of organizational support among their employees are likely to enhance organizational affective well-being.

FOOTNOTES

1. Although the majority of studies note a lack of relationship between NA and objective health, a small number of studies have found links between NA and objective health markers (Watson & Pennebaker, 1989). This suggests that the null hypothesis for NA and objective health relationships may not be, to date, entirely conclusive (Schaubroeck et al., 1992).
2. It should be noted however that the Ashford et al. (1989) sample was not experiencing downsizing or organizational change.
3. A number of employees who received questionnaires for this research via the random desk drop called the study phone line to inform this researcher that questionnaires and survey material from 4 different research projects had arrived at their desk at the same time. Two of the four studies were large in-house projects.
4. The research questionnaire also included Personal Projects Analysis (PPA) measures which were included for use in a larger study that goes beyond this research. For the reader's information the PPA is included in Appendices I and J with the complete questionnaire packages.
5. The STAI-State Anxiety and STAI-Trait Anxiety measures are similar constructs which assess emotional distress and anxiety (Spielberger, 1983) but the State measure assesses more immediate experience usually in response to specific stressors whereas the Trait measure assesses more stable habitual negative emotional responses irrespective of the nature or presence of a stressor. These two measures have been shown to tap different aspects of emotional negative experience: responses to specific stressors (STAI-State Anxiety) and more enduring individual differences even in the absence of a stressor (STAI-Trait Anxiety) (Spielberger, 1983).
6. Please note that the data was examined with and without these two outliers and was found to be roughly equivalent, therefore only the hierarchical regression analyses are reported without the outliers.
7. Watson et al. (1987) argue that research efforts aimed at minimizing or removing the biasing influence of NA in stress research in the workplace (or any where else for that matter) is more likely when research designs also include non-subjective measures of stress and health. While the absence of objective measures of stress and health weaken the present research design, logistical and practical realities precluded access to such measures in this organizational setting.
8. While differences between right and left hemispheric functioning provides a too simplistic accounting of PA and NA, the point made by Watson & Tellegen (1985) concerning the independence of PA and NA processes is well taken.

References

- Abdel-Halim, A. (1978). Employee affective responses to organizational stress: Moderating effects of job characteristics. Personnel Psychology, 31, 561-579.
- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. Journal of Applied Psychology, 81, (4), 411-420.
- Aldwin, C. M., & Revenson, T. A. (1987). Does coping help? A reexamination of the relation between coping and mental health. Journal of Personality and Social Psychology, 53, (2), 337-348.
- Alfredsson, L., & Theorell, T. (1983). Job characteristics of occupations and myocardial infarction risk: Effects of possible confounding factors. Social Science and Medicine, 20, 1497-1503.
- Alfredsson, L., Karasek, R. A., & Theorell, T. (1982). Myocardial infarction risk and psychosocial work environment: An analysis of the male Swedish working force. Social Science and Medicine, 16, 463-467.
- Anisman, H., & Zacharko, R. M. (1982). Depression: The predisposing influence of stress. The Behavioral and Brain Sciences, 5, 89-137.
- Antonovsky, A. (1979). Health, stress, and coping: New perspectives on mental and physical well-being. San Francisco: Jossey-Bass.
- Antonovsky, A. (1987). Unravelling the mystery of health: How people manage stress and stay well. San Francisco: Jossey-Bass.

Antonovsky, A. (1990). Pathways leading to successful coping and health. In M. Rosenbaum (Ed.). Learned resourcefulness: On coping skills, self-control, and adaptive behavior (pp. 31-63). New York: Springer.

Armstrong-Stassen, M. (1994). Coping with transition: a study of layoff survivors. Journal of Organizational Behavior, 15, 597-621.

Armstrong-Stassen, M (1997). The reactions of HRDC managers and employees to the downsizing initiative: Baseline results. Unpublished report prepared for Human Resources Development Canada, Hull, Quebec.

Ashford, S. J. (1988). Individual strategies for coping with stress during organizational transitions. The Journal of Applied Behavioral Science, 24, (1), 19-36.

Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, causes, and consequences of job insecurity: A theory-based measure and substantive test. Academy of Management Journal, 32, (4), 803-829.

Bacharach, S. B., Bamberger, P., & Conley, S. (1991). Work-home conflict among nurses and engineers: Mediating the impact of role stress on burnout and satisfaction at work. Journal of Organizational Behavior, 12, 39-53.

Bandura, A. (1986). Social foundations of thought and action: a social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1991). Self-efficacy mechanism in physiological activation and health promotion behavior. In J. Madden IV (Ed.). Neurobiology of learning, emotion, and affect (pp. 229-269). New York: Raven Press.

Bandura, A., Cioffi, C., Taylor, B., & Brouillard, M. E. (1988). Perceived self-efficacy in coping with cognitive stressors and opioid activation. Journal of Personality and Social Psychology, *55*, (3), 479-488.

Bandura, A., Taylor, C. B., Williams, S. L., Mefford, I. N., & Barchas, J. D. (1985). Catecholamine secretion as a function of perceived coping self-efficacy. Journal of Consulting and Clinical Psychology, *53*, 406-414.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, *51*, (1), 1173-1182.

Barling, J., & MacIntyre, A. T. (1993). Daily work role stressors, mood and emotional exhaustion. Work & Stress, *7*, (4), 315-325.

Barnett, R. (1995, Winter/ Spring). This job is driving me crazy! In the Works: Current research and scholarship at Radcliffe, 18.

Barnett, R. C., Davidson, H., & Marshall, N. L. (1991). Physical symptoms and the interplay of work and family roles. Health Psychology, *10*, (2), 94-101.

Barnett, R. C., Marshall, N. L., & Singer, J. D. (1992). Job experiences over time, multiple roles, and women's mental health: A longitudinal study. Journal of Personality and Social Psychology, *62*, (2), 634-644.

Barnett, R. C., & Marshall, N. L. (1993). Men, family-role quality, job-role quality, and physical health. Health Psychology, *12*, (1), 48-55.

Barnett, R. C., Marshall, N. L., Raudenbush, S. W., & Brennan, R. T. (1993).

Gender and the relationship between job experiences and psychological distress: A study of dual-earner couples. Journal of Personality and Social Psychology, 64, (5), 794-806.

Baruch, G. K., Biener, L., & Barnett, R. C. (1987). Women and gender in research on work and family stress. American Psychologist, 42, (2), 130-136.

Baum, A., Fleming, R., & Reddy, D. M. (1986). Unemployment stress: Loss of control, reactance and learned helplessness. Social Science Medicine, 22, 509-516.

Baum, A., & Grunberg, N. E. (1991). Gender, stress, and health. Health Psychology, 10, (2), 80-85.

Beehr, T. A., & McGrath, J. E. (1992). Social support, occupational stress and anxiety. Anxiety, Stress, and Coping, 5, 7-19.

Beehr, T. A., Walsh, J. T., & Taber, T. D. (1976). Relationship of stress to individually and organizationally valued states: Higher order needs as a moderator. Journal of Applied Psychology, 61, 41-47.

Berkman, L. F. (1985). The relationship of social networks and social support to morbidity and mortality: In S. Cohen & S. L. Syme (Eds.). Social support and health (pp. 241-262). Orlando, FL: Academic Press.

Bhalla, S. U. (1989). Work and nonwork stress: Psychosocial resources as moderators of their effects on personal and organizationally valued outcomes. PhD thesis, Department of Psychology, Carleton University, Ottawa.

Bhalla, S., Jones, B., & Flynn, D. M. (1991). Role stress among white collar workers. Work and Stress, 5, 289-299.

Bhalla, S., Jones, B., & Flynn, D. M. (1992). A note on the effects of coping strategies in mediating the effects of stress on strain. Unpublished report, Department of Psychology, Carleton University, Ottawa, Ontario.

Bhar, J., & Duxbury, L. (1994). Supervisor support at the PSC. unpublished report prepared for the Public Service Commission (PSC), October.

Billings, A. G., & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the stress of life events. Journal of Behavioral Medicine, 4, 139-157.

Billings, A. G., & Moos, R. H. (1984). Work stress and the stress-buffering roles of work and family resources. Journal of Occupational Behaviour, 3, 216-232.

Bolger, N. (1990). Coping as a personality process: A prospective study. Journal of Personality and Social Psychology, 59, 525-537.

Bowman, G. D., & Stern, M. (1995). Adjustment to occupational stress: The relationship of perceived control to effectiveness of coping strategies. Journal of Consulting Psychology, 42, (3), 294-303.

Brannick, M. T. (1995). Critical comments on applying covariance structure modelling. Journal of Organizational Behavior, 16, 201-213.

Brief, A. P., Burke, M. J., George, J. M., Robinson, B. S., & Webster, J. (1988). Should negative affectivity remain an unmeasured variable in the study of job stress? Journal of Applied Psychology, 73, (2), 193-198.

Brief, A. P., & Robertson, L. (1989). Job attitude organization: An exploratory study. Journal of Applied Social Psychology, 19, 717-727.

Brockner, J. (1990). Scope of justice in the workplace: How survivors react to co-worker layoffs. Journal of Social Issues, 46, (1), 95-106.

Brockner, J. (1988). The effects of work layoffs on survivors: research, theory, and practice. Research in Organizational Behavior, 10, 213-255.

Brockner, J., Grover, S., Reed, T. F., & Dewitt, R. L. (1992). Layoffs, job insecurity, and survivors' work effort: Evidence of an inverted-U relationship. Academy of Management Journal, 35, (2), 413-425.

Brockner, J., Wiesenfeld, T., Reed, T., Grover, S., & Martin, C. (1993). Interactive effect of job content and context on the reactions of layoff survivors. Journal of Personality and Social Psychology, 64 (2), 187-197.

Brown, G. W., & Harris, T. O. (Eds.). (1989). Life events and illness. New York: The Guilford Press.

Cameron, K., Freeman, S. J., & Mishra, A. (1991). Best practices in white-collar downsizings: Managing contradictions. Academy of Management Executive, 5, 57-73.

Caplan, R., Cobb, S., French, J., Van Harrison, R., & Pinneau, S. (1975). Job demands and worker health. Washington, DC: U.S. Department of Health, Education, and Welfare, National Institute for Occupational Safety and Health.

Carver, C. S., & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. Journal of Personality and Social Psychology, 66, (1), 184-195.

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. Journal of Personality and Social Psychology, 56, (2), 267-283.

Catanzaro, S. J., Horaney, F., & Creasey, G. (1995). Hassles, coping, and depressive symptoms in an elderly community sample: The role of mood regulation expectancies. Journal of Counselling Psychology, 42, (3), 259-265.

Chandrashekhkar, Y. (1991). Exercise as a coronary protective factor. American Heart Journal, 122, 1732-1739.

Chen, P. Y., & Spector, P. E. (1991). Negative affectivity as the underlying cause of correlations between stressors and strains. Journal of Applied Psychology, 76, (3), 398-407.

Clarke, J. N. (1983). Sexism, feminism and medicalism: a decade review of literature on gender and illness. Sociology of Health and Illness, 5, (1), 62-82.

Clark, L. A., & Watson, D. (1991). General affective dispositions in physical and psychological health. In C. R. Snyder & D. R. Forsyth (Eds.). Handbook of social and clinical psychology (pp. 221-245). New York: Pergamon Press.

Cohen, S., & Edwards, J. R. (1989). Personality characteristics as moderators of the relationship between stress and disorder. In Richard W. J. Neufeld (Ed.). Advances in the investigation of psychological stress. New York: J. Wiley & Sons, pp. 235-283.

Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. Journal of Applied Social Psychology, 13, 99-125.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 386-396.

Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the United States. In Spacapan, S. and Oskamp, S. (Eds.). The social psychology of health. Newbury Park, CA: Sage.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98, 310-357.

Collins, E. L., Baum, A., & Singer, J. E. (1983). Coping with chronic stress at Three Mile Island: Psychological and biochemical evidence. Health Psychology, 2, 149-166.

Collins, R. L., Taylor, S. E., & Skokan, L. A. (1990). A better world or a shattered vision? Changes in life perspectives following victimization. Social Cognition, 8, (3), 263-285.

Cook, R. A., & Rousseau, D. M. (1984). Stress and strain from family roles and work-role expectations. Journal of Applied Psychology, 69, 252-260.

Cooper, C. L., Kirkcaldy, B. D., & Brown, J. (1994). A model of job stress and physical health: the role of individual differences. Personality and Individual Differences, 16, (4), 653-655.

Cooper, C. L., & Marshall, J. (1976). Occupational sources of stress: A review of the literature relating coronary heart disease and mental ill health. Journal of Occupational Psychology, 49, 11-28.

Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. Journal of Applied Psychology, 78, (1), 98-104.

- Costa, P.T., & McCrae, R. R. (1985). The NEO Personality Inventory: Manual. Odessa, Florida: Psychological Assessment Resources.
- Costa, P.T., & McCrae, R. R. (1985). Hypochondriasis, neuroticism, and aging: When are somatic complaints unfounded? American Psychologist, *40*, (1), 19-28.
- Costa, P.T., & McCrae, R. R. (1987). Neuroticism, somatic complaints, and disease: Is the bark worse than the bite? Journal of Personality, *55*, (2), 299-316.
- Costa, P.T., & McCrae, R. R. (1990). Personality, stress, and coping: Some lessons from a decade of research. In K. S. Markides & C. L. Cooper (Eds.), Aging, stress, social support, and health. New York: Wiley.
- Cropanzano, R., James, K., & Konovsky, M. A. (1993). Dispositional affectivity as a predictor of work attitudes and job performance. Journal of Organizational Behavior, *14*, 595-606.
- Daley, A. J., & Parfitt, G. (1996). Good health - Is it worth it? Mood states, physical well-being, job satisfaction and absenteeism in members and non-members of a British corporate health and fitness club. Journal of Occupational and Organizational Psychology, *69*, 121-134.
- Davy, J. A., Kinicki, A. J., & Scheck, C. L. (1991). Developing and testing a model of survivor responses to layoffs. Journal of Vocational Behavior, *38*, 302-317.
- DeFleur, M. L., Kearney, P., & Plax, T. G. (1993). Fundamentals of Human Communication. Mountain View, California: Mayfield Publishing Company.
- Diener, E. (1984). Subjective well-being. Psychological Bulletin, *95*, (3), 542-575.

- Diener, E., & Emmons, R. A. (1985). The independence of Positive and Negative Affect. Journal of Personality and Social Psychology, 47, (5), 1105-1117.
- Dohrenwend, B. S., & Dohrenwend, B. P. (Eds.). (1974). Stressful life events: Their nature and effects. New York: Wiley.
- Dohrenwend, B. S., & Dohrenwend, B. P. (1984). Life stress and illness: Formulation of the issues. In B. S. Dohrenwend & B. P. Dohrenwend (Eds.), Stressful life events and their context (pp. 1-27). New Brunswick, NJ: Rutgers University Press.
- Donaldson, J. (1996). The impact of perceived economic resources on work stress and job insecurity among "survivors" of downsizing. Unpublished master's thesis. Carleton University, Ottawa.
- Duxbury, L. E., & Higgins, C. A. (1991). Gender differences in work-family conflict. Journal of Applied Psychology, 76, (1), 60-74.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. Journal of Applied Psychology, 75, (1), 51-59.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. Journal of Applied Psychology, 71, (3), 500-507.
- Endler, N. S. (1988). Hassles, health and happiness. In M. P. Janisse (Ed.), Individual differences, stress and health psychology (pp. 24-56). New York: Springer.
- Endler, N. S., & Parker, J. D. A. (1990). Multidimensional assessment of coping: A critical evaluation. Journal of Personality and Social Psychology, 58, (5), 844-854.

Endler, N. S., & Parker, J. D. A. (1990). State and trait anxiety, depression and coping styles. Australian Journal of Psychology, 42, 207-220.

Endler, N. S., & Parker, J. D. A. (1994). Assessment of multidimensional coping: Task, emotion, and avoidance strategies. Psychological Assessment, 6, (1), 50-60.

Endler, N. S., Parker, J. D. A., & Summerfeldt, L. J. (1993). Coping with health problems: Conceptual and methodological issues. Canadian Journal of Behavioural Science, 25, (3), 384-399.

Falkenberg, L. E. (1987). Employee fitness programs: Their impact on the employee and the organization. Academy of Management Review, 12, 511-522.

Ferguson, E., & Cheyne, A. (1995). Organizational change: Main and interactive effects. Journal of Occupational and Organizational Psychology, 68, 101-107.

Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. Journal of Personality and Social Psychology, 46, (4), 839-852.

Folkman, S. (1992). Making the case for coping. In B. Carpenter (Ed.), Personal coping: Theory, research, and application (pp. 31-46). Westport, Connecticut: Praeger.

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 21, 219-239.

Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. Journal of Personality and Social Psychology, 48, 150-170.

Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. Journal of Personality and Social Psychology, 50, (3), 571-579.

Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. Journal of Personality and Social Psychology, 50, 992-1003.

Friedman, H. S. (1991). The self-healing personality: Why some people achieve health and others succumb to illness. New York: Henry Holt & Company.

Friedman, H. S., & Booth-Kewley, S. B. (1987). The "disease-prone personality": A meta-analytic view of the construct. American Psychologist, 42, 539-555.

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. Journal of Applied Psychology, 77, (1), 65-78.

Frone, M. R., Russell, M., & Cooper, M. L. (1995). Job stressors, job involvement and employee health: A test of identity theory. Journal of Occupational and Organizational Psychology, 68, 1-11.

Gamble, R. P., Boreham, C. A. G., & Stevens, A. B. (1993). Effects of a 10-week exercise intervention program on exercise and work capacities in Belfast's ambulantmen. Journal of Occupational Medicine, 43, 85-89.

Ganster, D. C., Fusilier, M. R., & Mayes, B. T. (1986). Role of social support in the experience of stress at work. Journal of Applied Psychology, 71, 102-110.

- Ganster, D. C., & Schaubroeck, J. (1991). Work stress and employee health. Journal of Management, 17, (2), 235-271.
- George, J. M. (1992). The role of personality in organizational life: Issues and evidence. Journal of Management, 18, (2), 185-213.
- George, J. M., & Jones, G. R. (1996). The experience of work and turnover intentions: Interactive effects of value attainment, job satisfaction, and positive mood. Journal of Applied Psychology, 81, 318-325.
- Goldenberg, S., & Kline, T. (1997). White collar workers view their experience with downsizing or job loss. Psychological Reports, 80, 707-719.
- Gore, S. (1978). The effect of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19, 157-165.
- Gray, J. A. (1971). The psychophysiological basis of introversion-extraversion. Behavior Research and Therapy, 8, 249-266.
- Gray, J. A. (1987). Perspectives on anxiety and impulsivity: A commentary. Journal of Research on Personality, 21, 493-509.
- Greenhalgh, L. (1982). Maintaining organizational effectiveness during organizational retrenchment. Journal of Applied Behavioral Science, 18, (2), 155-170.
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. Academy of Management Review, 9, 438-448.
- Gronningsaeter, H., Christensen, C. C., Larsen, S., & Ursin, H. (1991). Health, job stress and psychological defence in physically active and inactive subjects. Scandinavian Journal of Medical Science and Sports, 1, 104-111.

Gunnar, M. R. (1986). Human developmental psychoneuroendocrinology: A review of research on neuroendocrine responses to challenge and threat in infancy and childhood. In M. E. Lamb, A. L. Brun, & B. Nopeff (Eds.). Advances in developmental psychology (pp. 51-103). Hillsdale, NJ: Lawrence Erlbaum.

Gunnar, M. R. (1989). Studies of human infant's adrenocortical response to potentially stressful events. New Directions for Child Development, 45, 3-18.

Hamid, P. N. (1990). Optimism and the reporting of flu episodes. Social Behavior and Personality, 18, (2), 225-234.

Hamilton, S., & Fagot, B. J. (1988). Chronic stress and coping styles: A comparison of male and female undergraduates. Journal of Personality and Social Psychology, 55, (5), 819-823.

Hart, P. M., Wearing, A. J., & Headey, B. (1995). Police stress and well-being: Integrating personality, coping and daily work experiences. Journal of Occupational and Organizational Psychology, 68, 133-156.

Hartley, J., Jacobson, D., Klandermans, B., & van Vuuren, T. (1991). Job insecurity: Coping with jobs at risk. London: Sage Publications.

Haynes, S. G., & Feinleib, M. (1982). Women, work and coronary heart disease: Results from the Framingham 10-year follow-up study. In P. Berman & E. Ramsey (Eds.). Women: A developmental perspective (NIH Publication No. 82-2298, pp. 79-104). Washington, DC: Government Printing Office.

Heppner, P. P., Cook, S. W., Wright, D. M., & Johnson, C. J. Jr. (1995). Progress in resolving problems: A problem-focused style of coping. Journal of Counselling Psychology, 42, (3). 279-293.

Higgins, C. A., & Duxbury, L. E. (1992). Work-family conflict: A comparison of dual career and traditional-career men. Journal of Organizational Behavior, 13, 389-411.

Higgins, C. A., Duxbury, L. E., & Irving, R. H. (1992). Work-family conflict in the dual-career family. Organizational Behavior and Human Decision Processes, 51, 51-75.

Higgins, C., Duxbury, L., & Lee, C. (1992). Balancing work and family: A study of Canadian private sector employees. National Centre for Management Research and Development, Western Business School, University of Western Ontario, December.

Holohan, C. J., & Moos, R. H. (1986). Personality, coping, and family resources in stress resistance: A longitudinal analysis. Journal of Personality and Social Psychology, 51, 389-395.

Holohan, C. J., & Moos, R. H. (1987). Personal and contextual determinants of coping strategies. Journal of Personality and Social Psychology, 52, 946-955.

Holohan, C. J., & Moos, R. H. (1987). Risk, resistance, and psychological distress: A longitudinal analysis of adults and children. Journal of Abnormal Psychology, 96, 3-13.

Holohan, C. J., & Moos, R. H. (1990). Life stressors, resistance factors, and improved psychological functioning: An extension of the stress resistance paradigm. Journal of Personality and Social Psychology, 58, 909-917.

Holohan, C. J., & Moos, R. H. (1991). Life stressors, personal and social resources, and depression: A four-year structural model. Journal of Abnormal Psychology, 100, 31-38.

House, J. S., Umberson, D., & Landis, K. R. (1988). Structures and processes of social support. American Review of Sociology, 14, 293-318.

House, S. J. (1981). Work stress and social support. MA: Addison-Wesley.

Hulin, C. L. (1987). A Psychometric theory of evaluations of items and scale translations: Fidelity across languages. Journal of Cross-Cultural Psychology, 18, (2), 115-142.

James, L. R., & Brett, J. M. (1984). Mediators, moderators, and tests for mediation. Journal of Applied Psychology, 69, (2), 307-321.

Jewell, L. N., & Siegal, M. (1990). Contemporary industrial/ organizational psychology (2nd Ed.). New York: West Publishing Company.

Jex, S. M., & Spector, P. E. (1992). The impact of negative affectivity on stressor-strain relationships: A replication and extension. Work and Stress.

Jick, T.D. (1985). As the axe falls: Budget cuts and the experience of stress in organizations. In T. A. Beehr & R. S. Bhagat (Eds.), Human stress and cognition in organizations (pp. 83-114). New York: John Wiley & Sons.

Jones, B., Flynn, D., & Kelloway, K. (1995). The perception of support from the organization in relation to work stress, satisfaction and commitment. Organizational risk factors for job stress. Washington, DC: APA/NIOSH.

Jones, G. R. (1983). Psychological orientation and the process of organizational socialization: an interactionist perspective. Academy of Management Review, 8, 464-474.

Jones, G. R. (1986). Socialization tactics, self-efficacy and newcomers' adjustment to organizations. Academy of Management Review, 29, 262-279.

Kahn, R. (1974). Conflict, ambiguity and overload: Three elements of job stress. In A. McLean (Ed.), Occupational stress. Springfield, Ill.: Charles Thomas.

Karasek, R. (1979). Job demands, job decision-latitude, and mental strain: Implications for job redesign. Administrative Science Quarterly, 24, 285-306.

Karasek, R., & Theorell, T. (1990). Healthy work: Stress, productivity, and the reconstruction of working life. New York: Basic Books Inc.

Karasek, R., Baker, D., Marxer, F., Ahlbom, A., & Theorell, T. (1981). Job decision latitude, job demands and cardiovascular disease: A prospective study of Swedish men. American Journal of Public Health, 71, 694-705.

Kasl, S. V., & Cobb, S. (1966). Health behavior, illness behavior, and sick role behavior. Archives of Environmental Health, 12, 246-266.

Kelloway, E. K., & Barling, J. (1990). Item content versus item wording: Disentangling role conflict and role ambiguity. Journal of Applied Psychology, 75, (6), 738-742.

Kelloway, E. K., & Barling, J. (1991). Job characteristics, role stress and mental health. Journal of Occupational Psychology, 64, 291-304.

Kenny, D. A., & Judd, C. M. (1984). Estimating the nonlinear and interactive effects of latent variables. Psychological Bulletin, 96, (1), 201-210.

Kiecolt-Glaser, J. K., & Glaser, R. (1990). Behavioral influences in immune function: Evidence of the interplay between stress and health. In T. Field, P. McCade, & A. Schneiderman (Eds.). Stress and coping (pp. 189-206). Hillsdale, NJ: Lawrence Erlbaum.

Kline, T., & Goldenberg, S. (1994). Gender differences and similarities in the downsizing experience. Paper presented at the Canadian Psychological Association (CPA) Annual Conference, Penticton, B.C., June.

Kobassa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. Journal of Personality and Social Psychology, 37, 1-11.

Kozlowski, S. W. J., Chao, G. T., Smith, E. M., & Hedlund, J. (1993). Organizational downsizing: Strategies, interventions, and research implications. In Cary L. Cooper and Ivan T. Robertson (Eds.). International Review of Industrial and Organizational Psychology, Volume 8 (pp. 263-332). New York: John Wiley & Sons Ltd.

Kristensen, T. S. (1989). Cardiovascular disease and the work environment. Scandinavian Journal of Work, Environment, and Health, 15, 165-179.

Kulik, J. A., & Mahler, H. I. M. (1989). Social support and recovery from surgery. Health Psychology, 8, 221-238.

Kulik, J. A., & Mahler, H. I. M. (1993). Emotional support as a moderator of adjustment and compliance after coronary bypass surgery: A longitudinal study. Journal of Behavioral Medicine, 16, 45-64.

Kobassa-Ouellette, S. C. (1990). Lessons from history: How to find the person in health psychology. In H. S. Friedman (Ed.), Personality and disease. New York: John Wiley & Sons.

Kobassa, S. C., Maddi, S. R., & Courington, S. (1981). Personality and constitution as mediators in the stress-illness relationship. Journal of Health and Social Behavior, 22, 368-378.

LaRocco, J. M. & Jones, A. P. (1978). Co-worker and leader support as moderators of stress-strain relationships in work situations. Journal of Applied Psychology, 63, (5), 629-634.

LaRocco, J. M., House, J. S., & French, J. R. (1980). Social support, occupational stress, and health. Journal of Health and Social Behavior, 21, 202-218.

Larsen, R. J., & Ketelaar, T. (1991). Personality and susceptibility to positive and negative emotional states. Journal of Personality and Social Psychology, 61, (1), 132-140.

Latack, J. C. (1986). Coping with job stress: Measures and future directions for scale development. Journal of applied Psychology, 71, (3), 377-385.

Lazarus, Richard S. (1991). Emotion and adaptation. New York: Oxford University Press.

Lazarus (1993). Why we should think of stress as a subset of emotion. In L. Goldberger & S. Breznitz (Eds.). Handbook of stress: Theoretical and clinical aspects (Second edition, pp. 21-39) New York: The Free Press.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer.

Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. European Journal of Personality, 1, 141-169.

Leana, C. R., & Feldman, D. C. (1991). Gender differences in responses to unemployment. Journal of Vocational Behavior, 38, 65-77.

Levin, I., & Stokes, J. P. (1989). Dispositional approach to job satisfaction: Role of negative affectivity. Journal of Applied Psychology, 74, (5), 752-758.

Little, B. R. (1983). Personal projects: A rationale and method for investigation. Environment and Behavior, 15, (3), 273-309.

Little, B. R. (1993). Personal projects and the distributed self: Aspects of a conative psychology. In J. Suls (Ed.). Psychological perspectives on the self: The self in social perspective (Vol. 4, pp. 157-185). Hillsdale, NJ: Lawrence Erlbaum.

Littlejohn, S. W. (1996). Theories of Human Communication. (5th Ed.). New York: Wadsworth Publishing Company.

Long, B. C. (1990). Relation between coping strategies, sex-typed traits, and environmental characteristics: A comparison of male and female managers. Journal of Counselling Psychology, 37, (2), 185-194.

Long, B. C., Kahn, S. E., & Schultz, R. W. (1992). Causal model of stress and coping: women in management. Journal of Counselling Psychology, 39, (2), 227-239.

Maddi, S. S. (1987). Hardiness training in Illinois Bell telephone. In J. P. Opatz (Ed.). Health promotion evaluation, (pp. 43-53). Birmingham, MI: Institute of Wellness.

Maddi, S. R., Bartone, P. T., & Puccetti, M. C. (1987). Stressful events are indeed a factor in physical illness: A reply to Schroeder and Costa. Journal of Personality and Social Psychology, 52, 833-843.

Maier, S., Laudenslager, M., & Ryan, S. (1985). Stressor controllability, immune function, and endogenous opiates. In J. Overmeier & S. Brush (Eds.). Affect, conditioning, and cognition: essays on the determinants of behavior (pp. 183-201). Hillsdale, NJ: Erlbaum.

Marshall, N. L., & Barnett, R. C. (1993). Variations in job strain across nursing and social work specialties. Journal of Community & Applied Social Psychology, 3, 261-271.

McCrae, R. R. (1982). Age differences in the use of coping mechanisms. Journal of Gerontology, 37, 454-460.

McCrae, R. R. (1984). Situational determinants of coping responses: Loss, threat, and challenge. Journal of Personality and Social Psychology, 46, 919-928.

McCrae, R. R. (1990). Controlling neuroticism in the measurement of stress. Stress Medicine, 6, 237-241.

McCrae, R. R., & Costa, P. T. (1986). Personality, coping, and coping effectiveness in an adult sample. Journal of Personality, 54, 383-405.

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. Journal of Personality and Social Psychology, 49, 710-721.

Meyer, J. P., & Allen, N. J. (1984). Testing the "Side-Bet Theory" of organizational commitment: Some methodological considerations. Journal of Applied Psychology, 69, (3), 372-378.

Miles, E. W., Patrick, S. L., & King, W. C. Jr. (1996). Job level as a systematic variable in predicting the relationship between supervisor communication and job satisfaction. Journal of Occupational and Organizational Psychology, 69, 277-292.

Miller, S. M. (1979). When is a little information is a dangerous thing? Coping with stressful events by monitoring and blunting. In S. Levine and H. Ursin (Eds.). Coping and health (pp. 145-169). New York: Plenum Press.

Miller, S. M. (1979). Controllability and human stress: Method, evidence and theory. Behaviour Research & Therapy, 17, 287-304.

Miller, S. M. (1979). Coping with impending stress: Psychophysiological and cognitive correlates of choice. Psychophysiology, 16, 572-581.

Miller, S. M. (1980). Why having control reduces stress: If I can stop the roller coaster, I don't want to get off. In J. Garber and M. E. P. Seligman (Eds.). Human helplessness: Theory and applications (pp. 71-95). New York: Academic Press.

Miller, S. M. (1981). Predictability and human stress: Toward a clarification of evidence and theory. Advances in Experimental Social Psychology, 14, 203-256.

Miller, S. M. (1987). Monitoring and blunting: Validation of a questionnaire to assess styles of information seeking under threat. Journal of Personality and Social Psychology, 52, (2), 345-353.

Miller, S. M. (1989). Cognitive informational styles in the process of coping with threat and frustration. Advances in Behavioral Research and Therapy, 11, 223-234.

Miller, S. M. (1990). To see or not to see: Cognitive informational styles in the coping process. In M. Rosenbaum (Ed.). Learned resourcefulness: On coping skills, self-control, and adaptive behavior (pp. 95-126). New York: Springer.

Miller, S. M. (1992). Monitoring and blunting in the face of threat: Implications for adaptation and health. In L. Montada, S. H. Filipp, and M. J. Lerner (Eds.). Life crises and experiences of loss in adulthood. NJ: Erlbaum.

Miller, S. M. (1992). Individual differences in the coping process: What to know and when to know it. In B. Carpenter (Ed.). Personal coping: Theory, research, and application (pp. 77-91). New York: Praeger.

Miller, S. M., & Birnbaum, A. (1988). Putting the life back into 'life events': Toward a cognitive social learning analysis of the coping process. In S. Fisher and J. Reason (Eds.). Handbook of life stress, cognition and health (pp. 497-509). New York: John Wiley & Sons.

Miller, S. M., & Birnbaum, A. (1989). When to whistle while you work: Towards a cognitive social learning approach to coping and health. In S. L. Sauter, J. J. Hurrell Jr., and C. L. Cooper (Eds.). Job control and worker health (pp. 237-251). New York: John Wiley & Sons.

Miller, S. M., Brody, D. S., & Summerton, J. (1988). Styles of coping with threat: Implications for health. Journal of Personality and Social Psychology, 54, 345-353.

Miller, S. M., C. Combs, & L. Kruss. (1993). Tuning in and tuning out: Confronting the effects of confrontation. In H. W. Krohne (Ed.). Attention and avoidance: Strategies in coping with aversiveness (pp. 51-69). New York: Springer-Verlag.

Miller, S. M., Combs, C., & Stoddard, E. (1989). Information, coping and control in patients undergoing surgery and stressful medical procedures. In A. Steptoe and A. Appels (Eds.). Stress, personal control and health (pp. 107-130). New York: John Wiley & Sons.

Miller, S. M., Leinbach, A., & Brody, D. S. (1989). Coping style in hypertensive patients: Nature and consequences. Journal of Consulting and Clinical Psychology, 57, (3), 333-337.

Miller, S. M., & Mangan, C. E. (1983). The interacting effects of information and coping style in adapting to gynaecologic stress: Should the doctor tell all? Journal of Personality and Social Psychology, 45, 223-236.

Mitchell, R. E., Cronkite, R. C., & Moos, R. H. (1983). Stress, coping, and depression among married couples. Journal of Abnormal Psychology, 92, 433-448.

Moos & Schaefer, (1993). Coping resources and processes: Current concepts and measures. In L. Goldberger & S. Breznitz (Eds.). Handbook of stress: Theoretical and clinical aspects (Second edition, pp. 234-257) New York: The Free Press.

Munz, D. C., Huelsman, T. J., Konold, T. R., & McKinney, J. J. (1996). Are there methodological and substantive roles for affectivity in job diagnostic survey relationships? Journal of Applied Psychology, 81, (6), 795-805.

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. Journal of Applied Psychology, 81, (4), 400-410.

Netemeyer, R., Johnston, M., & Burton, A. (1990). Analysis of role conflict and role ambiguity in a structural equations framework. Journal of Applied Psychology, 75, 148-157.

Ottaway, R. N., & Bhatnagar, D. (1988). Personality and biographical differences between male and female managers in the United States and India. Applied Psychology: An International Review, 37, 201-212.

Oullette (1993). Inquiries into hardiness. In L. Goldberger & S. Breznitz (Eds.). Handbook of stress: Theoretical and clinical aspects (Second edition, pp. 77-100) New York: The Free Press.

Parasuraman, S., & Hansen, D. (1987). Coping with work stressors in nursing: Effects of adaptive versus maladaptive strategies. Work and Occupations, 14, 88-105.

Parkes, K.R. (1982). Occupational stress among student nurses: A natural experiment. Journal of Applied Psychology, 67, 784-796.

Parkes, K. R. (1984). Locus of control, cognitive appraisal, and coping in stressful episodes. Journal of Personality and Social Psychology, 46, (3), 655-668.

Parkes, K. R. (1986). Coping in stressful episodes: The role of individual differences, environmental factors, and situational characteristics. Journal of Personality and Social Psychology, 51, 1277-1292.

Parkes, K. R. (1990). Coping, negative affectivity, and the work environment: Additive and interactive predictors of mental health. Journal of Applied Psychology, 75, (4), 399-409.

Pennebaker, J. W. (1982). The psychology of physical symptoms. New York: Springer-Verlag.

Perrewe, P. I., & Ganster, D. C. (1989). The impact of job demands and behavioral control on experienced job stress. Journal of Organizational Behavior, 10, 213-229.

Phillips, S.D., & Little, B.R. (1993, January). Just managing and women managers: From personal projects to public service. (Unpublished study). Ottawa: Canadian Centre for Management Development.

Phillips, S.D., Little, B.R., & Goodine, L. (1995, June). Organizational climate and personal projects: Gender differences in the public service. (Unpublished study). Ottawa: Canadian Centre for Management Development.

Phipps, S., & Zinn, A. B. (1986). Psychological response to amniocentesis: II. Effects of coping. American Journal of Medical Genetics, 25, 143-148.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. Journal of Management, 12, 531-544.

Pychyl, T. A. (1986). Hardiness and depressive affect in university undergraduates: A Project Analytic perspective. Unpublished MA thesis, Carleton University, Ottawa.

Rabkin, J. G., & Struening, E. L. (1976). Life events, stress and illness. Science, 194, 1013-1020.

Repetti, R. L. (1993). The effects of workload and the social environment at work on health. In L. Goldberger & S. Breznitz (Eds.). Handbook of stress: Theoretical and clinical aspects (Second edition, pp. 368-385).

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. Administrative Science Quarterly, 15, 150-163.

Rodin, J. (1986). Personal control through the life course. In R. Abeles (Ed.). Implications of the life span perspective for social psychology (pp. 103-120). Hillsdale, NJ: Lawrence Erlbaum.

Rodin, J., Timko, C., & Harris, S. (1985). The construct of control: Biological and psychological correlates. In M. P. Lawton & G. L. Maddox (Eds.). Annual review of gerontology and geriatrics (pp. 3-55). New York: Springer.

Romzek, B. S. (1985). The effects of public service recognition, job security and staff reductions on organizational involvement. Public Administration Review, 45, 282-292.

Rosenbaum, M. (Ed.). (1990). Learned resourcefulness: On coping skills, self-control, and adaptive behavior. New York: Springer.

- Roth, S., & Cohen, L. J. (1986). Approach, avoidance, and coping with stress. American Psychologist, 41, (1), 813-819.
- Seligman, M. E. P. (1975). Helplessness: On depression, development, and death. San Francisco: Freeman.
- Setton, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. Journal of Applied Psychology, 81, (3), 219-227.
- Schaubroeck, J., Ganster, D. C., & Fox, M. L. (1992). Dispositional affect and work-related stress. Journal of Applied Psychology, 77, (3), 322-335.
- Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Generalized outcome expectancies. Health Psychology, 4, (3), 219-247.
- Scheier, M. F., & Carver, C. S. (1987). Dispositional optimism and physical well-being: The influence of generalized outcome expectancies on health. Journal of Personality, 55, (2), 169-210.
- Schweiger, D. L., & Ivancevitch, J. M. (1985). Human resources: The forgotten factor in mergers and acquisitions. Personnel Administrator, 30, (11), 47-61.
- Shinn, M., Rosario, M., Morch, H., & Chestnut, D. (1984). Coping with job stress and burnout in the human services. Journal of Personality and Social Psychology, 46, (4), 864-876.
- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. Journal of Applied Psychology, 78, (5), 774-780.

Skinner, E. a. (1995). Perceived control, motivation, and coping: Individual differences and development series (vol. 8). Thousand Oaks: Sage Publications.

Smith, M. S., & Wallston, K. A. (1992). How to measure the value of health. Health Education Research: Theory and Practice, 7, (1), 129-135.

Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The measurement of satisfaction in work and retirement. Chicago: Rand-McNally.

Sparks, G. G. (1989). Understanding emotional reactions to a suspenseful movie: The interaction between forewarning and preferred coping style. Communications Monographs, 56, 325-340.

Spector, P. E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. Human Relations, 39, 1005-1016.

Spector, P. E. (1987). Interactive effects of perceived control and job stressors on affective reactions and health outcomes for clerical workers. Work and Stress, 1, 155-162.

Spector, P. E. (1992). A consideration of the validity and meaning of self-report measures of job conditions. International Review of Industrial and Organizational Psychology, 7, 123-151.

Spielberger, C. D. (1983). Manual for the State- Trait Anxiety Inventory: STAI (Form Y). Palo Alto, CA: Mind Garden.

Steffy, B. d., Jones, J. W., & Noe, A. W. (1990). The impact of health habits and life-style on the stressor-strain relationship: An evaluation of three industries. Journal of Occupational Psychology, 63, 217-229.

Stephoe, A. (1989). Psychobiological stress responses. In M. Johnston and L. Wallace (Eds.). Stress and medical procedures. Oxford: Oxford University Press.

Stephoe, A. (1989). The significance of personal control in health and disease. In A. Steptoe and A. Appels (Eds.). Stress, personal control and health (pp. 309-319). New York: John Wiley & Sons.

Stephoe, A., & O'Sullivan, J. (1986). Monitoring and blunting coping styles in women prior to surgery. British Journal of Clinical Psychology, 25, 143-144.

Stewart, A. S., & Salt, P. (1981). Life stress, life-styles, depression, and illness in adult women. Journal of Personality and Social Psychology, 40, 1063-1069.

Stone, W. J., Rothstein, D. E., & Shoenhair, C. L. (1991). Coronary health disease risk factors and health related fitness in long term exercising versus sedentary corporate executives. American Journal of Health Promotion, 5, (3), 169-173.

Stone-Romero, E. F., Weaver, A. E., & Glenar, J. L. (1995). Trends in research design and data analytic strategies in organizational research. Journal of Management, 21, (1), 141-157.

Strentz, T., & Auerbach, S. M. (1988). Adjustment to the stress of simulated captivity: Effects of emotion-focused vs. problem-focused preparation on hostages differing in locus of control. Journal of Personality and Social Psychology, 55, 652-660.

Suls, J., & Fletcher, B. (1985). The relative efficacy of avoidant and nonavoidant coping strategies: A meta-analysis. Health Psychology, 4, (3), 249-288.

Sutton, R., & Kahn, R. L. (1986). Prediction, understanding, and control as antidotes to organizational stress. In J. Lorsch (Ed.). Handbook of organizational behavior. Englewood Cliffs, NJ: Prentice-Hall.

Tabachnick, B. G., & Fidell, L. S. (1996). Using multivariate statistics: Third edition. California State University, Northridge: Harper Collins College Publishers.

Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. American Psychologist, 38, 1161-1173.

Taylor, S. (1995). Health Psychology: Third edition. New York: McGraw-Hill.

Taylor, S., & Brown, J. (1988). Illusion and well-being: A social psychological perspective on mental health. Journal of Social Issues, 103, 193-210.

Taylor, S. E., & Clarke, L. F. (1986). Does information improve adjustment to noxious events? In M. J. Saks, & L. Saxe (Eds.). Advances in applied social psychology (Vol. 3). Hillsdale, NJ: Erlbaum.

Taylor, S. E., & Dakof, G. D. (1988). Social support and the cancer patient. In S. Spacapan and S. Oskamp (Eds.). Social psychology of health. (pp. 95-116). Beverly Hills, CA: Sage.

Taylor, S. E., Helgeson, V. S., Reed, G. M., & Skokan, L. A. (1991). Self-generated feelings of control and adjustment to physical illness. Journal of Social Issues, 47, (4), 91-109.

Taylor, S. E., Lichtman, R. R., & Wood, J. V. (1984). Attributions, beliefs about control, and adjustment to breast cancer. Journal of Personality and Social Psychology, 46, (3), 489-502.

Tellegen, A. (1985). Structures of mood and personality and their relevance to assessing anxiety, with an emphasis on self-report. In A. H. Tuma & J. Mason (Eds.). Anxiety and the anxiety disorders (pp. 681-706). Hillsdale, NJ: Erlbaum.

Tetrick, L. E., & LaRocco, J. M. (1987). Understanding, prediction, and control as moderators of the relationships between perceived stress, satisfaction, and psychological well-being. Journal of Applied Psychology, 72, (4), 538-543.

Theorell, T. (1993). Medical and physiological aspects of job interventions. In C. L. Cooper, and I. T. Robertson (Eds.). International Review of Industrial and Organizational Psychology, 8, 173-192.

Thoits, P. (1983). Multiple identities and psychological well-being. American Sociological Review, 48, 174-187.

Thomas, I. T., & Ganster, D. C. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. Journal of applied Psychology, 80, 6-15.

Tombaugh, J. R., & White, L. P. (1990). Downsizing: An empirical assessment of survivor's perceptions in a postlayoff environment. Organization Development Journal, 8, (2), 32-43.

Umberson, D. (1987). Family status and health behaviors: Social support as a dimension of social integration. Journal of Health and Social Behavior, 28, 306-319.

Vaillant, G. E. (1976). Natural history of male psychological health: 5. The relation of choice of ego mechanisms of defense to adult adjustment. Archives of General Psychiatry, 33, 535-545.

Vallerand, R. J. (1989). Vers une méthodologie de validation trans-culturelle de questionnaires psychologiques: Implications pour la recherche en langue française. Canadian Psychology, 30, (4), 662-680.

Verbrugge, L. M. (1985). Gender and health. Journal of Health and Social Behavior, 26, 156-182.

Verbrugge, L. M. (1986). Role burdens and physical health of men and women. Women and Health, 11, 47-77.

Vickers, R. R., Conway, T. L., & Hervig, M. S. (1990). Demonstration of replicable dimensions of health behaviors. Preventive Medicine, 19, 377-401.

Wall, T. D., Jackson, P. R., Mullarkey, S., & Parker, S. K. (1996). The demands-control model of job strain: A more specific test. Journal of Occupational and Organizational Psychology, 69, 153-166.

Walsh, J. P. (1988). Top management turnover following mergers and acquisitions. Strategic Management Journal, 9, 173-183.

Walsh, S., & Jackson, P. R. (1995). Partner support and gender: Contexts for coping with job loss. Journal of Occupational and Organizational Psychology, 68, 253-268.

Walston, B. S., Algagna, S. W., DeVellis, B. M., & DeVellis, R. F. (1983). Social support and physical health. Health Psychology, 2, 367-391.

Warr, P. (1990). The measurement of well-being and other aspects of mental health. Journal of Occupational Psychology, 63, 193-210.

Warr, P., Barter, J., & Brownbridge, G. (1983). On the independence of Positive and Negative Affect. Journal of Personality and Social Psychology, 44, (3), 644-651.

Watkins, L. O., Weaver, L., & Odegaard, V. (1986). Preparation for cardiac catheterization: tailoring the content of instruction to coping style. Heart & Lung, 15, (4), 382-389.

Watson, D. (1988). Intraindividual and interindividual analyses of positive and negative affect: Their relation to health complaints, perceived stress, and daily activities. Journal of Personality and Social Psychology, 54, (6), 1020-1030.

Watson, D., & Clarke, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. Psychological Bulletin, 96, (3), 465-490.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of Positive and Negative Affect: The PANAS scales. Journal of Personality and Social Psychology, 54, (6), 1063-1070.

Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress, and distress: Exploring the central role of negative affectivity. Psychological Review, 96, (2), 234-254.

Watson, D. M., Pennebaker, J. W., & Folger, R. (1987). Beyond negative affectivity: Measuring stress and satisfaction in the workplace. Journal of Organizational Behavior Management, 8, (2), 141-157.

Watson, D., & Slack, A. K. (1993). General factors of affective temperament and their relation to job satisfaction over time. Organizational Behavior and Human Decision Processes, 54, 181-202.

Watson, D., & Tellegen, A. (1985). Towards a consensual structure of mood. Psychological Bulletin, 98, (2), 219-235.

Wiersma, U. J. (1990). Gender differences in job attribute preferences: Work-home role conflict and job level as mediating variables. Journal of Occupational Psychology, 63, 231-243.

Williams, L. J., & Anderson, S. E. (1994). An alternative approach to method effects using latent-variable models: Applications in organizational behavior research. Journal of Applied Psychology, 79, (3), 323-331.

Williams, L. J., Gavin, M. B., & Williams, M. L. (1996). Measurement and nonmeasurement processes with negative affectivity and employee attitudes. Journal of Applied Psychology, 81, 88-101.

Zevon, M. A., & Tellegen, A. (1982). The structure of mood change: An idiographic/ nomothetic analysis. Journal of Personality and Social Psychology, 43, (1), 111-122.

Ziff, M. A., Conrad, P., & Lachman, M. E. (1995). The relative effects of perceived personal control and responsibility on health and health-related behaviors in young and middle-aged adults. Health Education Quarterly, 22, (1), 127-142.

APPENDIX A:

Letters to Managers and Employees (Room Testing)

STUDY ON COPING STYLES AND HEALTH IN THE FACE OF DOWNSIZING

LETTER TO MANAGERS

This is to request your assistance in compiling a sample of HRDC employees in the NCR to take part in a research project concerned with how employees are experiencing downsizing.

Specifically, in addition to distributing to your employees the attached letter introducing the study and soliciting volunteers, we would ask that you actively encourage them to participate by indicating your personal support for the project and making it easy for them to take time out of their workday to complete the questionnaire. By the same token, your own participation is also welcomed and you too are encouraged to complete a questionnaire.

Participating employees may be directly and/or indirectly affected by the downsizing (i.e., those who have been notified they are affected, and those who have not). Participation will entail approximately two hours to complete a questionnaire on any of the dates and times listed below. If you wish, other dates, times and locations for group sessions can be arranged. The researcher, Mary Anne Robblee of Carleton University, will be available at these times to answer any questions employees may have.* Participation is entirely voluntary and the questionnaire is confidential and non-threatening.

Mary Anne Robblee is a PhD student in Psychology at Carleton University, and this study is her doctoral dissertation in organizational and health psychology. It is not an official departmental "employee survey" or "pulse taking", and no raw data will be provided to the department. However, in exchange for our participation, Mary Anne Robblee will provide HRDC with an in-depth report on the study results. She will also provide a summary of the overall results to individual participants who request a copy.

This study has the endorsement and support of the Deputy Minister, and is being coordinated by Cynthia Waugh at the HRDC Career Centre (phone - 994-0579). We expect that the findings will assist us to develop future organizational initiatives and support strategies aimed at ensuring employee well-being. Support for this study also provides an opportunity to communicate a "caring" message to our employees by demonstrating a pro-active interest in how they are experiencing downsizing, which may support morale and enhance HRDC's progressive and positive organizational image.

* If you would like further clarification or information about this research, please feel free to contact Mary Anne Robblee directly at 729-9176 Carleton University, Department of Psychology, Health Psychology & Organizational Psychology Laboratories.

ÉTUDE SUR LES STYLES D'ADAPTATION ET LA SANTÉ
EN PÉRIODE DE RÉDUCTION DES EFFECTIFS

LETTRE À L'INTENTION DES GESTIONNAIRES

La présente a pour but d'obtenir votre aide afin de recruter un échantillon d'employés de DRHC dans la RCN pour participer à un projet de recherche sur la façon dont les employés vivent la réduction des effectifs.

Plus spécifiquement, en plus de distribuer à vos employés la lettre ci-jointe qui annonce l'étude et sollicite des volontaires, nous désirons que vous les encouragiez fortement à y participer en leur indiquant que vous appuyez personnellement ce projet et en leur donnant l'occasion de prendre le temps voulu pendant leurs heures de travail pour remplir le questionnaire. En outre, votre propre participation est aussi la bienvenue et on vous encourage à remplir le questionnaire.

Les employés qui participeront à l'étude peuvent être touchés directement ou indirectement par la réduction des effectifs (c.-à-d. ceux qui ont été avisés qu'ils seront touchés et ceux qui ne l'ont pas été). Dans le cadre de votre participation à cette étude, qui se tiendra à l'une des dates et heures indiquées ci-après, vous aurez à remplir un questionnaire qui prendra environ deux heures de votre temps. Si vous le désirez, d'autres dates, heures et endroits pourront être négociés pour accommoder les séances en groupe. Le chercheur, Mary Anne Robblee de l'Université Carleton, sera disponible lors des séances pour répondre aux questions des employés. *La participation n'est pas obligatoire et le questionnaire est confidentiel et non menaçant.

Mary Anne Robblee est une étudiante au doctorat en psychologie à l'Université Carleton et la présente étude constitue sa thèse de doctorat en psychologie organisationnelle et de la santé. Il ne s'agit pas d'un recensement des employés officiel ou d'un sondage pour prendre le pouls de l'organisation et aucune donnée brute ne sera remise au Ministère. Cependant, en échange de notre participation, Mary Anne Robblee soumettra à DRHC un rapport détaillé des résultats de l'étude. Elle s'engage aussi à remettre un résumé des résultats globaux de l'étude à chaque participant qui en fait la demande.

Le sous-ministre endosse et appuie cette étude et Cynthia Waugh du Centre de carrière de DRHC (téléphone 994-0579) en assume la coordination. Nous nous attendons à ce que les conclusions de l'étude nous aident à élaborer de nouvelles initiatives organisationnelles et stratégies de soutien pour assurer le bien-être des employés. Notre soutien à cette étude nous donne l'occasion d'envoyer un message empathique à nos employés en démontrant un intérêt proactif envers la façon dont ils vivent la réduction des effectifs. Ceci pourrait aussi contribuer à appuyer le moral et à donner une image positive et constructive de l'organisation.

* Si vous désirez d'autres précisions ou renseignements au sujet de cette étude, veuillez communiquer avec Mary Anne Robblee du Département de psychologie, Psychologie de la santé et laboratoires de psychologie organisationnelle, au 729-9176.

STUDY ON COPING STYLES AND HEALTH IN THE FACE OF DOWNSIZING

LETTER TO EMPLOYEES

We request and welcome your participation in an independent study concerned with how HRDC employees are experiencing and coping with downsizing. This study is being conducted by Mary Anne Robblee of the Department of Psychology at Carleton University.

Although this is not an "official" HRDC pulse-taking exercise, your participation will help to provide information essential to understanding the impact of downsizing on employees. As a result of your participation, we believe this study will help us improve the support services and initiatives that we offer HRDC employees. Your participation is very important and will be greatly appreciated.

It will take approximately two hours of your time to complete a research questionnaire. The questionnaire can be completed during working hours at any of the sessions listed on the attached schedule. Registration is not necessary, but if you wish to confirm your attendance or book at another time, please contact Mary Anne Robblee at Carleton University (729-9176). Mary Anne will administer the questionnaire and will be available to answer any questions you may have. Coffee and treats will be provided to participants.

Your participation is entirely voluntary, and your responses are completely confidential. No one in your work setting or home organization will ever have access to them, and in the final analyses all data will be aggregated. If you wish, you can receive a summary of the overall results of this study. If you would like further clarification or information about this research, please feel free to contact Mary Anne Robblee directly at 729-9176 Carleton University, Department of Psychology, Health Psychology & Organizational Psychology Laboratories. For an HRDC contact, please call Cynthia Waugh at the HRDC Career Centre (819) 994-0579 or Suzanne Pilloud-Proulx, with HRDC's Wellness and Intervention Program (i.e. EAP) at (819) 953-1238.

ÉTUDE SUR LES STYLES D'ADAPTATION ET LA SANTÉ
EN PÉRIODE DE RÉDUCTION DES EFFECTIFS

LETTRE À L'INTENTION DES EMPLOYÉS

Nous sollicitons et apprécions votre participation à une étude indépendante sur la façon dont les employés de DRHC vivent la réduction des effectifs. Cette étude est menée par Mary Anne Robblee du Département de psychologie de l'Université Carleton.

Bien que la présente étude ne constitue pas un exercice officiel mené par DRHC pour prendre le pouls de l'organisation, votre participation nous aidera à recueillir des renseignements essentiels pour comprendre l'incidence de la réduction des effectifs sur les employés. À l'issue de votre participation, nous croyons que cette étude nous aidera à améliorer les services et initiatives de soutien que nous offrons aux employés de DRHC. Votre participation est très importante et sera grandement appréciée.

Le questionnaire de recherche prend environ deux heures à remplir. Il peut être rempli durant les heures de travail et à n'importe laquelle des séances qui figurent à l'horaire ci-joint. Vous n'êtes pas tenu de vous inscrire, mais si vous désirez confirmer votre participation ou désirez vous présenter à un autre moment, veuillez communiquer avec Mary Anne Robblee à l'Université Carleton, au 729-9176. Mary Anne administrera le questionnaire et sera disponible pour répondre à vos questions. On offrira du café et des gâteries aux participants.

Votre participation est tout à fait facultative et vos réponses sont confidentielles. Personne à votre lieu de travail ou organisme d'attache ne pourra y avoir accès et, en dernière analyse, toutes les données seront regroupées. Si vous le désirez, vous pouvez recevoir un résumé des résultats globaux de cette étude. Si vous désirez obtenir d'autres précisions ou renseignements concernant cette recherche, n'hésitez pas à communiquer avec Mary Anne Robblee directement au 729-9176, Université Carleton, Département de psychologie, Psychologie de la santé et laboratoires de psychologie organisationnelle. À DRHC, vous pouvez communiquer avec l'une ou l'autre des personnes ressources suivantes : Cynthia Waugh, Centre de carrière de DRHC, au (819) 994-0579, ou Suzanne Pilloud-Proulx, Programme d'intervention et de mieux-être (c.-à-d. PAE), au (819) 953-1238.

APPENDIX B:

Letters to Assistant Deputy Ministers (ADMs) & Employees
(Random Desk Drop)

Human Resources
Development CanadaDéveloppement des
ressources humaines Canada

MEMORANDUM NOTE DE SERVICE

To
Pour
NHQ Executive Heads
Cadres supérieurs de l'administration centrale

From
Origine
Assistant Deputy Minister, Human Resources
Sous-ministre adjoint, Ressources humaines

Classification
Cote sécuritaireYour file
Votre référenceOur file
Notre référenceTelephone Number
N° de téléphone

NOV 12 1996

Date

Subject
Objet
Study on Coping Styles, Stress and Health

Études sur les comportements, le stress et la santé

As you are aware, Jean-Jacques Noreau, former Deputy Minister, HRDC, authorized Ms. Mary Anne Robblee, a Carleton PhD Psychology student, to examine how specific cognitive styles of HRDC employees relate to work and non-work behaviour and health in the face of stressors such as organizational downsizing (see attached letter). A number of NHQ employees have already participated in this study, but the sampling target has not yet been achieved.

Comme vous le savez, Jean-Jacques Noreau alors qu'il était sous-ministre de DRHC a permis à Mary Anne Robblee, étudiante en psychologie de l'université Carleton, d'entreprendre une étude sur les comportements des employés de DRHC et le lien avec les éléments internes et externes du travail et la santé devant des situations stressantes comme la décroissance (voir la note ci-jointe). Plusieurs employés de l'administration centrale ont déjà participé à l'étude, mais l'échantillonnage visé n'est pas encore complet.

Ms. Robblee will be contacting you soon to discuss how the findings of her study will benefit the organization as well as to explore ways to increase the number of participants.

Mme Robblee communiquera avec vous prochainement pour discuter des avantages que ses constatations auront sur l'organisation et pour examiner les moyens à prendre pour augmenter le nombre de participants.

I am sure you will provide your full support to this study which will be most beneficial to HRDC.

Je suis certaine que vous apporterez tout votre appui à cette étude qui sera très profitable à DRHC.

Monique Plante
Monique Plante

Att.

p.j.

Canada

STUDY ON COPING STYLES AND HEALTH IN THE FACE OF DOWNSIZING

LETTER TO MANAGERS

This is to request your assistance in compiling a sample of HRDC employees in the NCR to take part in a research project concerned with how employees are experiencing downsizing.

Specifically, in addition to distributing to your employees the attached letter introducing the study and soliciting volunteers, we would ask that you actively encourage them to participate by indicating your personal support for the project and making it easy for them to take time out of their workday to complete the questionnaire. By the same token, your own participation is also welcomed and you too are encouraged to complete a questionnaire.

Participating employees may be directly and/or indirectly affected by the downsizing (i.e., those who have been notified they are affected, and those who have not). Participation will entail approximately two hours to complete a questionnaire on any of the dates and times listed below. If you wish, other dates, times and locations for group sessions can be arranged. The researcher, Mary Anne Robblee of Carleton University, will be available at these times to answer any questions employees may have.* Participation is entirely voluntary and the questionnaire is confidential and non-threatening.

Mary Anne Robblee is a PhD student in Psychology at Carleton University, and this study is her doctoral dissertation in organizational and health psychology. It is not an official departmental "employee survey" or "pulse taking", and no raw data will be provided to the department. However, in exchange for our participation, Mary Anne Robblee will provide HRDC with an in-depth report on the study results. She will also provide a summary of the overall results to individual participants who request a copy.

This study has the endorsement and support of the Deputy Minister, and is being coordinated by Cynthia Waugh at the HRDC Career Centre (phone - 994-0579). We expect that the findings will assist us to develop future organizational initiatives and support strategies aimed at ensuring employee well-being. Support for this study also provides an opportunity to communicate a "caring" message to our employees by demonstrating a pro-active interest in how they are experiencing downsizing, which may support morale and enhance HRDC's progressive and positive organizational image.

* If you would like further clarification or information about this research, please feel free to contact Mary Anne Robblee directly at 729-9176 Carleton University, Department of Psychology, Health Psychology & Organizational Psychology Laboratories.

ÉTUDE SUR LES STYLES D'ADAPTATION ET LA SANTÉ EN PÉRIODE DE RÉDUCTION DES EFFECTIFS

LETTRE À L'INTENTION DES GESTIONNAIRES

La présente a pour but d'obtenir votre aide afin de recruter un échantillon d'employés de DRHC dans la RCN pour participer à un projet de recherche sur la façon dont les employés vivent la réduction des effectifs.

Plus spécifiquement, en plus de distribuer à vos employés la lettre ci-jointe qui annonce l'étude et sollicite des volontaires, nous désirons que vous les encouragiez fortement à y participer en leur indiquant que vous appuyez personnellement ce projet et en leur donnant l'occasion de prendre le temps voulu pendant leurs heures de travail pour remplir le questionnaire. En outre, votre propre participation est aussi la bienvenue et on vous encourage à remplir le questionnaire.

Les employés qui participeront à l'étude peuvent être touchés directement ou indirectement par la réduction des effectifs (c.-à-d. ceux qui ont été avisés qu'ils seront touchés et ceux qui ne l'ont pas été). Dans le cadre de votre participation à cette étude, qui se tiendra à l'une des dates et heures indiquées ci-après, vous aurez à remplir un questionnaire qui prendra environ deux heures de votre temps. Si vous le désirez, d'autres dates, heures et endroits pourront être négociés pour accommoder les séances en groupe. Le chercheur, Mary Anne Robblee de l'Université Carleton, sera disponible lors des séances pour répondre aux questions des employés. La participation n'est pas obligatoire et le questionnaire est confidentiel et non menaçant.

Mary Anne Robblee est une étudiante au doctorat en psychologie à l'Université Carleton et la présente étude constitue sa thèse de doctorat en psychologie organisationnelle et de la santé. Il ne s'agit pas d'un «recensement des employés» officiel ou d'un sondage pour prendre le pouls de l'organisation et aucune donnée brute ne sera remise au Ministère. Cependant, en échange de notre participation, Mary Anne Robblee soumettra à DRHC un rapport détaillé des résultats de l'étude. Elle s'engage aussi à remettre un résumé des résultats globaux de l'étude à chaque participant qui en fait la demande.

Le sous-ministre endosse et appuie cette étude et Cynthia Waugh du Centre de carrière de DRHC (téléphone 994-0579) en assume la coordination. Nous nous attendons à ce que les conclusions de l'étude nous aident à élaborer de nouvelles initiatives organisationnelles et stratégies de soutien pour assurer le bien-être des employés. Notre soutien à cette étude nous donne l'occasion d'envoyer un message «empathique» à nos employés en démontrant un intérêt proactif envers la façon dont ils vivent la réduction des effectifs. Ceci pourrait aussi contribuer à appuyer le moral et à donner une image positive et constructive de l'organisation.

* Si vous désirez d'autres précisions ou renseignements au sujet de cette étude, veuillez communiquer avec Mary Anne Robblee du Département de psychologie, Psychologie de la santé et laboratoires de psychologie organisationnelle, au 729-9176.

STUDY ON STRESS AND HEALTH FOR HRDC EMPLOYEES

You have been chosen at random to participate in an independent study on stress and health being conducted by Mary Anne Robblee of the Carleton University Department of Psychology, as part of her doctoral thesis.

Participation is entirely voluntary, and your responses are completely confidential. No one in your work setting or home organization will ever have access to them, and in the final analyses all data will be aggregated. If you are unable to participate for any reason, please feel free to pass this research package on to one of your colleagues who would like to complete the questionnaire.

Attached is a bilingual questionnaire (recto-verso) that takes 1 to 2 hours to complete. While some people have taken 2 hours to complete the questionnaire, you can limit your time to one hour by: (1) setting a 45 minute time limit for yourself to do the first section of the questionnaire that deals with Personal Projects Analysis, and (2) if you go over this time limit, leave the Personal Projects section and move on to the remainder of the questionnaire that takes 15 to 20 minutes to complete.

Please place all completed questionnaire materials in the prepaid envelope provided and mail it to Mary Anne Robblee at Carleton University within the next two weeks.

Employees who have completed this questionnaire so far say it is well worth the time because it provided them with greater insight and a better tool for self-assessment than more conventional questionnaire formats. In addition, Mary Anne will provide a summary of the overall results to participants who request a copy.

Preliminary testing for this study started in February 1996 and this research has the endorsement of the Deputy Minister. It is hoped that the findings of this research can be used to help develop future organizational initiatives and support strategies aimed at ensuring employee well-being.

Your participation is very important and will be greatly appreciated.

If you would like more information about this research, please feel free to contact Mary Anne Robblee directly at the study phone line 729-9176 (Carleton University, Department of Psychology, Health Psychology & Organizational Psychology Laboratories).

Thank you for your cooperation, and we hope that you get as much out of your participation as those who have already completed the questionnaire.

ÉTUDE SUR LE STRESS ET LA SANTÉ POUR LE PERSONNEL DE DRHC

Vous avez été choisi(e) au hasard pour participer à une étude indépendante sur le stress et la santé menée par Mary Anne Robblee du département de psychologie de l'Université Carleton. Cette recherche fait partie du programme de recherche pour sa thèse de doctorat.

La participation à cette étude est volontaire et vos réponses demeureront complètement confidentielles. Personne de votre milieu de travail ou de votre ministère n'aura accès à vos réponses. L'analyse finale présentera les résultats globaux de l'enquête et non les résultats individuels. Si vous ne pouvez participer, pour quelque raison que ce soit, veuillez offrir cette trousse de recherche à un(e) de vos collègues qui serait intéressé(e) à prendre part à l'étude.

Vous trouverez ci-joint un questionnaire bilingue (recto-verso) qui vous demandera une heure ou deux de votre temps. Bien que certaines personnes aient eu besoin de deux heures pour le remplir, vous pouvez vous fixer une limite d'une heure en accordant 45 minutes à la première partie (analyse des projets personnels) et en passant ensuite, que vous ayez ou non terminé la première partie, au reste du questionnaire, qui exige habituellement de 15 à 20 minutes.

Une fois le questionnaire rempli, veuillez le placer dans l'enveloppe préaffranchie incluse dans la trousse et faire parvenir le tout par la poste à Mary Anne Robblee dans les deux prochaines semaines.

Les employés et employées qui ont déjà participé à l'étude ont dit qu'il s'agit d'une expérience enrichissante qui leur a donné une meilleure connaissance d'eux-mêmes ou d'elles-mêmes et que le questionnaire est un meilleur outil d'auto-évaluation que les questionnaires traditionnels. De plus, Mary Anne se fera un plaisir de fournir un sommaire des résultats globaux aux participants et participantes qui en feront la demande.

L'étude a débuté en février 1996 avec l'appui du sous-ministre. Nous espérons que les résultats nous aideront à élaborer de nouvelles initiatives et stratégies organisationnelles pour assurer le bien-être de nos employés et employées.

Si vous désirez obtenir davantage de renseignements au sujet de l'étude, vous pouvez communiquer directement avec Mary Anne Robblee au 729-9176 (aux laboratoires de psychologie de la santé et de psychologie organisationnelle du département de psychologie de l'Université Carleton).

Nous vous remercions de votre collaboration et souhaitons que votre participation soit aussi enrichissante pour vous qu'elle l'a été pour ceux et celles qui vous ont précédé(e).

APPENDIX C:

Coping Measures

Appendix C.01

MILLER'S BEHAVIOURAL STYLE SCALE (MBSS)

1. Vividly imagine that you are afraid of the dentist and have to get some dental work done. Which of the following would you do? Check all of the statements that might apply to you.

- ☐ I would ask the dentist exactly what he/she was going to do.
- ☐ I would take a tranquilizer or have a drink before going.
- ☐ I would try to think about pleasant memories.
- ☐ I would want the dentist to tell me when I would feel pain.
- ☐ I would try to sleep.
- ☐ I would watch all the dentist's movements and listen for the sound of his/her drill.
- ☐ I would watch the flow of water from my mouth to see if it contained blood.
- ☐ I would do mental puzzles in my mind.

2. Vividly imagine that you are being held hostage by a group of armed terrorists in a public building. Which of the following would you do? Check all of the statements that might apply to you.

- ☐ I would sit by myself and have as many daydreams and fantasies as I could.
- ☐ I would stay alert and try to keep myself from falling asleep.
- ☐ I would exchange life stories with the other hostages.
- ☐ If there was a radio present, I would stay near it and listen to the bulletins about what the police were doing.
- ☐ I would watch every movement of my captors and keep an eye on their weapons.
- ☐ I would try to sleep as much as possible.
- ☐ I would think about how nice it's going to be when I get home.
- ☐ I would make sure I knew where every possible exit was.

3. Vividly imagine that, due to a large drop in sales, it is rumoured that several people in your department at work will be laid off. Your supervisor has turned in an evaluation of your work for the past year. The decision about lay-offs has been made and will be announced in several days. Check all of the statements that might apply to you.

- ☐ I would talk to my fellow workers to see if they knew anything about what the supervisor's evaluation of me said.
- ☐ I would review the list of duties for my present job and try to figure out if I had fulfilled them all.
- ☐ I would go to the movies to take my mind off things.
- ☐ I would try to remember any arguments or disagreements I might have had with the supervisor that would have lowered his/her opinion of me.
- ☐ I would push all thoughts of being laid off out of my mind.
- ☐ I would tell my spouse (or significant other/close friend) that I'd rather not discuss my chances of being laid off.
- ☐ I would try to think which employees in my department the supervisor might have thought had done the worst job.
- ☐ I would continue doing my job as if nothing special was happening.

4. Vividly imagine that you are on an airplane, thirty minutes from your destination, when the plane unexpectedly goes into a deep dive and then suddenly levels off. After a short time, the pilot announces that nothing is wrong, although the rest of the ride may be rough. You, however, are not convinced that all is well. Check all of the statements that might apply to you.

- _____ I would carefully read the information provided about safety features in the plane and make sure I knew where the emergency exits were.
- _____ I would make small talk with the passenger beside me.
- _____ I would watch the end of the movie, even if I had seen it before.
- _____ I would call for the steward/stewardess and ask him/her exactly what the problem was.
- _____ I would order a drink or tranquilizer from the steward/stewardess.
- _____ I would listen carefully to the engines for unusual noises and would watch the crew to see if their behaviour was out of the ordinary.
- _____ I would talk to the passenger beside me about what might be wrong.
- _____ I would settle down and read a book or magazine or write a letter.

COPING RESPONSE MEASURE (Ashford, 1988)

Please read each of the following 5 statements and indicate by circling on a 5-point scale the extent to which you agree or disagree that the statement *describes your own behaviour*.

5.	I try to look at the restructuring/ downsizing as an opportunity.	1	2	3	4	5
----	---	---	---	---	---	---

1	2	3	4	5
Very Characteristic				Very Uncharacteristic

1.	I focus on my current job and try to think about the restructuring/downsizing as little as possible.	1	2	3	4	5
2.	I read everything I can get to try to understand the restructuring/downsizing.	1	2	3	4	5
3.	I share worries and anxieties with others in the same position as me.	1	2	3	4	5
4.	I seek out information from various sources about the restructuring/ downsizing and its implications.	1	2	3	4	5
5.	I share my worries with close coworkers.	1	2	3	4	5
6.	I don't even think about the restructuring/downsizing	1	2	3	4	5
7.	I share my worries with friends outside the work setting and/or my spouse.	1	2	3	4	5
8.	I cope by forgetting about the restructuring/downsizing until it happens to me.	1	2	3	4	5

Appendix C.03

CHANGE SPECIFIC EFFICACY SCALE (Ashford, 1988)

A number of statements which people have used to describe how and what they do with respect to downsizing/restructuring in organizations are given below.

Please read each of the following 5 statements and indicate by circling on a 5-point scale the extent to which you agree or disagree that the statement *describes your own behaviour*.

1 2 3 4 5
Strongly *Strongly*
Agree *Disagree*

1.	Wherever the restructuring/downsizing takes me, I'm sure I can handle it.	1	2	3	4	5
2.	I get nervous that I may not be able to do all that is demanded of me by the restructuring/ downsizing.	1	2	3	4	5
3.	I have reason to believe I may not perform well in my job situation following the restructuring/downsizing.	1	2	3	4	5
4.	Though I may need some training, I have little doubt I can perform well following the restructuring/downsizing.	1	2	3	4	5

Appendix C.04

PERCEIVED ORGANIZATIONAL CONTROL - POWERLESSNESS SCALE (Ashford et al., 1989)

Please indicate by circling the number in the rating scale which most accurately indicates how much you agree or disagree with the following statements.

1= Strongly disagree 2= Disagree 3= Agree 4= Strongly Agree

1.	I have enough power in this organization to control events that might affect my job.	1	2	3	4
2.	In this organization, I can prevent negative things from affecting my work situation.	1	2	3	4
3.	I understand this organization well enough to be able to control things that affect me.	1	2	3	4

Appendix C.05

PERCEIVED ORGANIZATIONAL SUPPORT (Eisenberger et al., 1986, 1990)

POS

Below you will find a number of statements about the organization for which you work, each of which you may agree or disagree with depending on your own personal evaluation. Please indicate your degree of agreement or disagreement with each statement by circling a number from 1 to 7 according to the following scale.

1	2	3	4	5	6	7
<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Mildly Disagree</i>	<i>Neither Agree or Disagree</i>	<i>Mildly Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>

1.	The organization values my contribution to its well-being.	1	2	3	4	5	6	7
2.	If the organization could hire someone to replace me at a lower level, it would do so.	1	2	3	4	5	6	7
3.	The organization fails to appreciate any extra effort from me.	1	2	3	4	5	6	7
4.	The organization strongly considers my goals and values.	1	2	3	4	5	6	7
5.	The organization would ignore any complaint from me.	1	2	3	4	5	6	7
6.	The organization disregards my best interests when it makes decisions which affect me.	1	2	3	4	5	6	7
7.	Help is available from my organization when I have a problem.	1	2	3	4	5	6	7
8.	The organization really cares about my well-being.	1	2	3	4	5	6	7

Appendix C.06

THE HEALTH BEHAVIOURS CHECKLIST (HBC) (Vickers et al., 1990)

Please indicate how often each of the following items describe your *typical behaviour*. Responses may range from 0 (never do this, not typical of me) to 4 (extremely typical of me, do this almost always).

0 Never/ Not Typical	1 Rarely	2 Sometimes	3 Often	4 Almost Always/ Extremely Typical	
1. I eat a balanced diet.	0	1	2	3	4
2. I get enough sleep.	0	1	2	3	4
3. I keep emergency numbers by the phone.	0	1	2	3	4
4. I choose my spare-time activities to help me relax.	0	1	2	3	4
5. I take chances when crossing the street.	0	1	2	3	4
6. I have a first aid kit in my home.	0	1	2	3	4
7. I destroy old or unused medicines.	0	1	2	3	4
8. I see a doctor for regular checkups.	0	1	2	3	4
9. I pray or live by principles of religion.	0	1	2	3	4
10. I avoid getting chilled.	0	1	2	3	4
11. I watch my weight.	0	1	2	3	4
12. I carefully obey traffic rules so I won't have accidents.	0	1	2	3	4
13. I watch for signs of major health problems (e.g., cancer, hypertension, heart disease).	0	1	2	3	4
14. I exercise to stay healthy.	0	1	2	3	4
15. I cross the street against the stop light.	0	1	2	3	4
16. I avoid high crime areas.	0	1	2	3	4
17. I don't smoke.	0	1	2	3	4
18. I don't take chemical substances which might injure my health (e.g., food additives, drugs, stimulants).	0	1	2	3	4
19. I check the condition of electrical appliances, the car, etc., to avoid accidents.	0	1	2	3	4
20. I stay away from places where I might be exposed to germs.	0	1	2	3	4
21. I fix broken things around home right away.	0	1	2	3	4
22. I see a dentist for regular checkups.	0	1	2	3	4

Please indicate how often each of the following items describe your *typical behaviour*. Responses may range from 0 (never do this, not typical of me) to 4 (extremely typical of me, do this almost always).

0 Never/ Not Typical	1 Rarely	2 Sometimes	3 Often	4 Almost Always/ Extremely Typical	
23. I limit my intake of foods like coffee, sugar, fats, etc.	0	1	2	3	4
24. I avoid over-the-counter medicines.	0	1	2	3	4
25. I take vitamins.	0	1	2	3	4
26. I do not drink alcohol.	0	1	2	3	4
27. I wear a seat belt when in the car.	0	1	2	3	4
28. I cross busy streets in the middle of the block.	0	1	2	3	4
29. I avoid areas of high pollution.	0	1	2	3	4
30. I discuss health with friends, neighbours and/or relatives.	0	1	2	3	4
31. I gather information on things that affect my health by watching television and reading books, newspapers, or magazine articles.	0	1	2	3	4
32. I use dental floss regularly.	0	1	2	3	4
33. I speed while driving.	0	1	2	3	4
34. I brush my teeth regularly.	0	1	2	3	4
35. I take health food supplements (e.g., protein additives, wheat germ, bran, lecithin, etc.).	0	1	2	3	4
36. I learn first aid techniques.	0	1	2	3	4
37. I get shots to prevent illness.	0	1	2	3	4
38. I take more chances doing things than the average person.	0	1	2	3	4
39. I drive after drinking.	0	1	2	3	4
40. I engage in activities or hobbies where accidents are possible.	0	1	2	3	4

Please indicate any additional health behaviours you feel are relevant and indicate, using the same response scale, how typical they are of you.

Additional health behaviours

How typical of you (indicate scale number)

1. _____

2. _____

APPENDIX D:

Appraisal Variables

Appendix D.01

Job Insecurity

The next series of questions are concerned with issues directly related to the recent downsizing/restructuring initiatives that all federal government public servants are going through. Please read each of the following questions and indicate by circling your response on the rating scales that correspond to the question. Please read each scale carefully as the descriptors and anchors vary for the different questions.

1. What is the likelihood that you would be facing a job loss arising from "downsizing" over the next 3 years?

1	2	3	4	5	6	7	8	9	10
NOT AT ALL									VERY LIKELY/
LIKELY									ALMOST CERTAINLY

2. Suppose you were to be laid off/downsized. If so, how well do you think the assistance management actually offered those laid off would provide for your needs.

1	2	3	4	5	6	7	8	9	10
NOT AT ALL								A GREAT DEAL	

3. How likely is it that you will be in the same job next year?

1	2	3	4	5	6	7	8	9	10
VERY UNLIKELY/ NO CHANCE OF								VERY LIKELY/ WILL DEFINITELY	
STAYING								STAY	

4. How likely is it that you will be in the same type of work next year?

1	2	3	4	5	6	7	8	9	10
VERY UNLIKELY/ NO CHANCE									VERY LIKELY/ DEFINITELY

Job Insecurity

1	2	3	4	5
Extremely Uncertain				Extremely Certain

1.	How certain are you of the opportunities for promotion and advancement which will exist in the next few years with this organization?	1	2	3	4	5
2.	How certain are you about what your future career picture looks like with this organization?	1	2	3	4	5
3.	How certain are you about your job security?	1	2	3	4	5

What are the chances that you will be fired or laid off within the next year? Please indicate below.

1	2	3	4	5
0% chance	25% chance	50% chance	75% chance	100% chance

Job Role Stress Appraisal: Role Conflict, Ambiguity & Overload

1 2 3 4 5 6 7

very false* *very true

1.	I receive an assignment without the manpower to complete it.	1	2	3	4	5	6	7
2.	I am given enough time to do what is expected of me on my job.	1	2	3	4	5	6	7
3.	It seems like I have too much work for one person to do.	1	2	3	4	5	6	7
4.	On my present job, the amount of work seems to interfere with how well I can do the job.	1	2	3	4	5	6	7
5.	I often notice a marked increase in my work load.	1	2	3	4	5	6	7
6.	I have to do things that should be done differently.	1	2	3	4	5	6	7
7.	I work with two or more groups who operate quite differently.	1	2	3	4	5	6	7
8.	I receive incompatible requests from two or more people.	1	2	3	4	5	6	7
9.	I do things that are apt to be accepted by one person and not accepted by others.	1	2	3	4	5	6	7
10.	I work on unnecessary things.	1	2	3	4	5	6	7
11.	I feel certain about how much authority I have.	1	2	3	4	5	6	7
12.	I have clear, planned goals and objectives for my job.	1	2	3	4	5	6	7
13.	I know I have divided my time properly.	1	2	3	4	5	6	7
14.	I know exactly what is expected of me.	1	2	3	4	5	6	7
15.	Explanation is clear of what has to be done.	1	2	3	4	5	6	7

Appendix D.03

Perceived Stress Scale

The questions that follow ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling *how often* you felt or thought a certain way.

0= Never 1= Almost Never 2= Sometimes 3= Fairly Often 4=Very Often

1.	In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
2.	In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3.	In the last month, how often have you felt nervous and "stressed"?	0	1	2	3	4
4.	In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
5.	In the last month, how often have you felt that things were going your way?	0	1	2	3	4
6.	In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
7.	In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
8.	In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
9.	In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4
10.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

APPENDIX E:

Organizational Outcomes

Appendix E.01

Job Satisfaction (JDI Scale) (Smith et al., 1969)

Think of your job in general. What is it like most of the time?

In the blank beside each word write:

- Y for "Yes" if it describes your job
N for "No" if it does NOT describe your job, or
? if you cannot decide.

JOB IN GENERAL

- _____ Pleasant
- _____ Bad
- _____ Ideal
- _____ Waste of Time
- _____ Good
- _____ Undesirable
- _____ Worthwhile
- _____ Acceptable
- _____ Like to Leave
- _____ Better than most
- _____ Disagreeable
- _____ Makes me content
- _____ Inadequate
- _____ Excellent
- _____ Rotten
- _____ Enjoyable
- _____ Poor

Appendix E.02

Organizational Commitment (Meyer & Allen, 1984)

Below you will find a number of statements about the organization for which you work, each of which you may agree or disagree with depending on your own personal evaluation. Please indicate your degree of agreement or disagreement with each statement by circling a number from 1 to 7 according to the following scale.

1	2	3	4	5	6	7
<i>Strongly</i>	<i>Disagree</i>	<i>Mildly</i>	<i>Neither</i>	<i>Mildly</i>	<i>Agree</i>	<i>Strongly</i>
<i>Disagree</i>		<i>Disagree</i>	<i>Agree or</i>	<i>Agree</i>		<i>Agree</i>
			<i>Disagree</i>			

1.	I feel a strong sense of belonging to my organization.	1	2	3	4	5	6	7
2.	I do not feel emotionally attached to this organization.	1	2	3	4	5	6	7
3.	This organization has a great deal of personal meaning for me.	1	2	3	4	5	6	7
4.	I do not feel like "part of the family" at this organization.	1	2	3	4	5	6	7
5.	I would be happy to spend the rest of my career with this organization.	1	2	3	4	5	6	7
6.	I enjoy discussing my organization with people outside it.	1	2	3	4	5	6	7
7.	I really feel as if this organization's problems are my own.	1	2	3	4	5	6	7
8.	I think I could easily become as attached to another organization as I am to this one.	1	2	3	4	5	6	7
9.	Right now staying with my organization is a matter of necessity as much as desire.	1	2	3	4	5	6	7
10.	One of the reasons I continue to work for this organization is that leaving would require considerable personal sacrifice -- another organization would not match the overall benefits I have.	1	2	3	4	5	6	7
11.	I feel I have too few options to consider leaving this organization.	1	2	3	4	5	6	7
12.	One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.	1	2	3	4	5	6	7

Below you will find a number of statements about the organization for which you work, each of which you may agree or disagree with depending on your own personal evaluation. Please indicate your degree of agreement or disagreement with each statement by circling a number from 1 to 7 according to the following scale.

1	2	3	4	5	6	7
<i>Strongly</i>	<i>Disagree</i>	<i>Mildly</i>	<i>Neither</i>	<i>Mildly</i>	<i>Agree</i>	<i>Strongly</i>
<i>Disagree</i>		<i>Disagree</i>	<i>Agree or</i>	<i>Agree</i>		<i>Agree</i>
			<i>Disagree</i>			

13.	It would be hard for me to leave my organization right now, even if I wanted to.	1	2	3	4	5	6	7
14.	Too much of my life would be disrupted if I decided I wanted to leave my organization now.	1	2	3	4	5	6	7
15.	It wouldn't be too costly for me to leave my organization in the future.	1	2	3	4	5	6	7
16.	I'm not afraid of what would happen if I quit my job without having another lined up.	1	2	3	4	5	6	7

APPENDIX F:

Health Outcomes

Appendix F.01

STAI State Anxiety Inventory (S Anxiety) (Form Y)

STAI-YI

A number of statements which people have used to describe themselves are given below. Please read each statement and indicate by circling the most appropriate number on the rating scale below how you *feel at present*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

1= Not At All 2= Somewhat 3= Moderately So 4= Very Much So

1. I feel calm.	1	2	3	4
2. I feel secure.	1	2	3	4
3. I am tense.	1	2	3	4
4. I feel strained.	1	2	3	4
5. I feel at ease.	1	2	3	4
6. I feel upset.	1	2	3	4
7. I am presently worrying over possible misfortunes.	1	2	3	4
8. I feel satisfied.	1	2	3	4
9. I feel frightened.	1	2	3	4
10. I feel comfortable.	1	2	3	4
11. I feel self-confident.	1	2	3	4
12. I feel nervous.	1	2	3	4
13. I am jittery.	1	2	3	4
14. I feel indecisive.	1	2	3	4
15. I am relaxed.	1	2	3	4
16. I feel content.	1	2	3	4
17. I am worried.	1	2	3	4
18. I feel confused.	1	2	3	4
19. I feel steady.	1	2	3	4
20. I feel pleasant.	1	2	3	4

0	1	2	3	4
Not bothered				Extreme bother

19.	Numbness or trembling in parts of your body	0	1	2	3	4
20.	Felt weak all over	0	1	2	3	4
21.	Pains in heart or chest	0	1	2	3	4
22.	Feeling low in energy	0	1	2	3	4
23.	Stuffy head or nose	0	1	2	3	4
24.	Blurred vision	0	1	2	3	4
25.	Muscle tension or soreness	0	1	2	3	4
26.	Muscle cramps	0	1	2	3	4
27.	Severe aches and pains	0	1	2	3	4
28.	Acne	0	1	2	3	4
29.	Bruises	0	1	2	3	4
30.	Nosebleed	0	1	2	3	4
31.	Pulled (strained) muscles	0	1	2	3	4
32.	Pulled (strained) ligaments	0	1	2	3	4
33.	Cold or cough	0	1	2	3	4

APPENDIX G:

Trait Negative Affectivity Measure

STAI Trait Anxiety Inventory (T- Anxiety) (Form Y)

A number of statements which people have used to describe themselves are given below. Please read each statement and indicate by circling the most appropriate number on the rating scale below how you generally or typically feel.

1= *Almost Never* 2= *Sometimes* 3= *Often* 4= *Almost Always*

21. I feel pleasant.	1	2	3	4
22. I feel nervous and restless.	1	2	3	4
23. I feel satisfied with myself.	1	2	3	4
24. I wish I could be as happy as others seem to be.	1	2	3	4
25. I feel like a failure.	1	2	3	4
26. I feel rested.	1	2	3	4
27. I am "calm, cool, and collected".	1	2	3	4
28. I feel that difficulties are piling up so that I cannot overcome them.	1	2	3	4
29. I worry too much over something that really doesn't matter.	1	2	3	4
30. I am happy.	1	2	3	4
31. I have disturbing thoughts.	1	2	3	4
32. I lack self-confidence.	1	2	3	4
33. I feel secure.	1	2	3	4
34. I make decisions easily.	1	2	3	4
35. I feel inadequate.	1	2	3	4
36. I am content.	1	2	3	4
37. Some unimportant thought runs through my mind and bothers me.	1	2	3	4
38. I take disappointments so keenly that I can't put them out of my mind.	1	2	3	4
39. I am a steady person.	1	2	3	4
40. I get in a state of tension or turmoil as I think over my recent concerns and interests.	1	2	3	4

APPENDIX H:

Demographic Detail

GENERAL INFORMATION

We would like some general information about you. All information will be kept strictly confidential and anonymous and will be used only to describe (in aggregated fashion) the characteristics of individuals who participated in this research. At no times will individuals be identified or information organized or summarized in a fashion that individuals' identities can be determined.

1. Gender: ____ Male ____ Female (please check)
2. Age: ____ (in years)
3. Marital Status: (circle answer)
 1. SINGLE (NEVER MARRIED)
 2. MARRIED
 3. SEPARATED/DIVORCED
 4. WIDOW/WIDOWER
 5. OTHER _____
4. If you have children, how many are living with you that you financially support, or how many do you financially support? _____ NUMBER OF CHILDREN
5. Are you responsible for caring for other people (e.g., elderly persons living with you)
 _____ YES _____ NO
6. What is your present job classification? (Group and level) _____
7. How long have you been in this position? _____ (years)
8. How long have you been employed in the public service? _____ (years)
9. On average, how many hours a week do you spend working at the office? _____ (hours)
10. On average, how many hours a week do you spend doing work-related work at home? _____ (hours)
11. What is the highest level of education you have received? _____
12. Have you been identified as an "affected" or "surplus" individual by the government downsizing exercise?
 _____ YES _____ NO
13. Are you planning to take advantage of the ERI/ EDI ? (CHECK ONE)
 _____ YES _____ NO _____ UNDECIDED
14. If yes, which one?
 ERI (Early Retirement Incentive) _____ or EDI (Early Departure Incentive) _____
15. What is your first language? (CHECK ONLY ONE)
 _____ English
 _____ French
 _____ Other (Please specify) _____

APPENDIX I:

Complete Questionnaire Package

(English Version)

COGNITIVE COPING STYLES, JOB INSECURITY, PERSONAL PROJECTS
AND HEALTH
PARTICIPANT BRIEFING LETTER

Dear Participant:

We welcome your participation in this project conducted by Mary Anne Robblee of the Department of Psychology, Carleton University under the supervision of Dr. Mary Gick and Dr. W. Jones. This particular study is concerned with the joys, problems, hassles and benefits of people's experience in their job and the relationship between work and other activities one performs in daily life. We are also interested in understanding the stresses of your job, how you are experiencing and dealing with downsizing, your coping styles and how they may be related to health and adaptation. Your participation will help provide information essential to understanding more fully this complex set of relationships. Further, through this information it will be possible to formulate suggestions for more informed interventions and strategies both inside and outside of organizations. Your participation is very important and greatly appreciated by us.

No deception is involved, nor does your participation involve anything likely to be threatening or embarrassing to you. All your responses are confidential and will be identified only by an experimental number. This experimental number is for administrative purposes only. Your name will never be placed on the questionnaires or associated with the project results. No one in your work setting or home organization will ever have access to your responses. In the final analysis all data will be aggregated.

In order for the results of this study to truly represent the reactions of members of your organization, it is very important that every questionnaire and question be completed and returned to the investigator, Mary Anne Robblee. However, at the same time, there is no obligation for you to answer any question that you consider invasive.

The questionnaire package will take approximately 1 to at the most 2 hours to complete. The questionnaire instructions are as follows:

1. Before you begin, please read and complete the Informed Consent Form and hand this in with your questionnaire package. (After you hand this in, it will be separated from your questionnaire package).
2. Please respond to questions and items in the order that they are presented to you as it is important that everyone experiences the questionnaire in the same way.
3. Please feel free to ask any questions that you may have about filling in this questionnaire.

When the results have been analyzed, all participants will receive a summary of the major findings of this study. All results will be reported in statistical form, with no reference to any particular individual.

If you have any questions regarding this study, feel free to contact Mary Anne Robblee at 729-9176 or Dr. Mary Gick at 520-2600 (ext. 2664). The Chairman of the Psychology Department, Dr. W. Jones (ext. 2648) and the Chairman of the Ethics Committee, Dr. L. Paquet (ext. 2692) may be contacted if you have any ethical concerns regarding the study.

In closing, I would like to thank you again for your participation.

Sincerely,

A handwritten signature in cursive script that reads "Ma Robblee". The signature is written in black ink and is positioned below the word "Sincerely,".

Mary Anne Robblee, M.A.
Department of Psychology
Carleton University
Ottawa, Ontario

Adapted from Phillips & Little (1993)

CARLETON UNIVERSITY
DEPARTMENT OF PSYCHOLOGY
HEALTH PSYCHOLOGY & ORGANIZATIONAL PSYCHOLOGY LABORATORIES

INFORMED CONSENT FORM

Title: Cognitive Coping Styles, Job Insecurity, Personal Projects, and Health

Investigator: Mary Anne Robblee, M.A.

Academic Advisors: Dr. Mary Gick and Dr. W. Jones

Name of Participant: _____
(please print)

I understand that this study in which I have agreed to participate will involve filling in questionnaires. Although the instructions vary for each questionnaire, all are straightforward. There are no correct or incorrect answers to the questions. The one request is that they are completed as honestly as possible.

I understand that my participation in this study is voluntary and that I may withdraw from the study at any time and for any reason.

I understand that there is no obligation to answer any question that I consider invasive.

I understand that all personal data and all my responses will be kept strictly confidential.

I understand that in return for my participation, I will receive a summary of the major findings of this study.

(please sign here)

Please include a mailing address if you would like the summary results of this study.

Date: _____

Adapted from Phillips & Little (1993)

SECTION 1:

PERSONAL PROJECTS ANALYSIS

We are interested in studying the kinds of activities and concerns that people have at different stages of their life. We call these *personal projects*. All of us have a number of personal projects at any given time that we think about, plan for, carry out, and sometimes (though not always) complete. In this sense, projects may be on-going tasks as well as finite ones; they may be things we choose to do or things we have to do. Please think of projects in this broad way. We are particularly interested in the projects that you are involved in at work, at home, in leisure and in the community.

Here are some examples of projects:

- Finishing my degree
- Spending more time with my kids
- Organizing the bazaar for Big Sisters/Brothers
- Cleaning the garage
- Finishing the report to my director
- Getting along better with my colleagues
- Trying to motivate myself/others
- Applying for the job competition
- Getting more outdoor exercise
- Losing ten pounds
- Trying to finish the book a friend gave me
- Redecorating the basement
- Trying to clarify my religious beliefs
- Making a birthday present for my friend

We are also interested in finding out how people feel about these personal projects, how enjoyable they are, and so on. We would appreciate it if you could begin by just writing down in the next few minutes as many personal projects you can that you are engaged in at the present time -- remember these are not necessarily formal projects, or important ones -- we would prefer you to give us more of the everyday kinds of activities or concerns that characterize your life at present.

List of Projects

Please go ahead and write down as many of your personal projects as you can in the next few minutes. Don't spend any more than ten minutes maximum.

[illegible]

Project Rating Matrices

Now that you have written out your projects, we would like you to think about them in terms of two categories -- **work projects and non-work projects**.

First, please select the five **work-related projects** which you think would be of interest to explore in more detail in order to better understand your work life. These may not be necessarily the most important or demanding projects or work activities you are engaged in. Recopy these projects in as brief a form as possible on the **PERSONAL PROJECTS MATRIX**. If you have more than 5, select the five which you feel would best describe your relationship to your work. If you have listed less than 5, please think of a few more work-related projects to increase your list to 5.

Now, please select five **non-work projects** that would be of interest to explore in more detail in order to better understand that part of your life and copy them underneath the work projects. Again, if you have more than five, please select the five that would best describe to us your non-work life projects. If you have less than 5, please think of a few more non-work projects to increase your list to 5.

For each **work or non-work project**, just make your description long enough to keep each project clearly in mind. It is important for everyone to fill in **5 work-related projects and 5 non-work projects**.

☛ Now refer to the attached list of dimensions and their descriptors (on the following pages or refer to the booklet provided, "Personal Projects: Dimensions & Descriptors"), and please rate each one of your projects using any number from 0 to 10 on each factor listed using the number that seems most correct to you.

Please rate each one of your projects using any number from 0 to 10 (**using the number that seems most correct to you**) on the following dimensions. Do this by adding your own rating, under each dimension on the **PERSONAL PROJECTS MATRIX**.

Example of Scale:

0	1	2	3	4	5	6	7	8	9	10
Not at all										Very much so

1. **Importance:** how important each project is to you at the present time (use 10 if the project is very important to you and 0 if it is not at all important to you).
2. **Enjoyment:** how you enjoy working on each project (use 10 if you enjoy it a great deal and 0 if you do not enjoy it at all).
3. **Difficulty:** how difficult you find it to carry out each project (use 10 for a project that you find very difficult to carry out and 0 for one that you do not find difficult at all).
4. **Control:** how much you feel you are in control of each project (use 10 for a project over which you feel in complete control and 0 for a project over which you feel you have no control at all).
5. **Initiation:** how much you feel responsible for having initiated each project (use 10 if you feel fully responsible for having initiated a project and 0 if you feel you have taken no part whatsoever in initiating a project).
6. **Stress:** how stressful it is for you to carry out each project (use 10 if the project is very stressful to carry out and 0 if a project is very relaxing to carry out).
7. **Time Pressure:** to what extent do you feel time pressure in working on each project (use 10 if you feel highly time pressured and 0 if you feel no time pressure at all in doing the project).
8. **Outcome:** what you anticipate the outcome of each project to be (use 10 if you think that a project will be extremely successful and 0 if you think that a project will turn out to be a total failure).

9. **Self-Identity:** all of us have things that we do that are typical of us. These things can be thought of as our "trade marks" or our "personal style". For example, some people engage in sports every chance they get, others prefer to read, others prefer to socialize. Think of what your own personal "trade marks" are, and then rate each project on the extent to which it is expressive of you (use 10 if a project is very expressive of you and 0 if it is not at all typical or expressive of you at all).
10. **Others' View:** how important each project is seen to be by relevant people who are close to you either at work or home (use 10 if a project is seen by others as very important and 0 if it is seen as not important at all).
11. **Value Congruency:** to what extent is each project consistent with the values which guide your life (use 10 if a project is totally consistent with your values and 0 if a project is totally at odds with them).
12. **Positive Impact:** how much you feel that each project helps the others (projects). Don't worry whether it hinders or not, we'll get to that on the next dimension (use 10 to indicate that a project greatly increases your chances of working on other projects and 0 to indicate that a project has no positive impact).
13. **Negative Impact:** how much you feel that each project hinders other projects (use 10 to indicate that a project seriously hinders your chances of working on other projects and 0 to indicate that it does not have any negative effect).
14. **Progress:** how successful have you been in a project so far (use 10 to indicate that you have been very successful and 0 to indicate that you have had no success at all).
15. **Challenge:** to what extent each project is demanding and challenging to you (use 10 if a project is most challenging and 0 if it is not challenging at all).
16. **Commitment:** to what extent are you committed to the successful completion of this project (use 10 if you are totally committed, use 0 if you are not at all committed).
17. **Absorption:** to what extent you become engrossed or deeply involved in a project (use 10 if you generally get involved in an activity and 0 if you tend to be uninvolved when doing it).

18. Competence: to what extent do you feel competent to carry out this project? (use 10 if you feel completely competent to carry out this project and 0 if you do not feel competent at all to carry it out).
19. Support: to what extent do you feel each project is supported by other people. For work projects, this would include supervisors and co-workers and for non-work projects this may be family or friends. (use 10 if you feel other people support this project fully and 0 if there is no support at all).
- 20a. Affect: when engaged in a particular project, there is often a particular feeling or emotion that one experiences. These can range from any number of emotions, for example: pride, joy, excitement, anxiety, fear, affection, cynicism, boredom, hope, anger, regret, bitterness, and cheerfulness to mention a few.
- ☛ **Think of the emotion or feeling which comes to mind regarding this project. Please write this emotion or feeling in the space provided.**
- 20b. Strength of Affect: to what extent do you feel this emotion in the context of a project (use 10 if this emotion is experienced to an extreme degree, 5 to a moderate degree, and 0 if felt only to a minimal extent).

Work projects only

21. Supportiveness of culture: to what extent do you feel that the culture (or we might say atmosphere or climate) of your organization supports this project (use 10 if you feel it supports this project a great deal and 0 if it does not support it at all).
22. Hindrance of culture: to what extent you feel that the culture (or might we say atmosphere or climate) of your organization impedes or frustrates this project (use 10 if you feel it impedes or frustrates this project a great deal and 0 if it does not frustrate it at all).

SECTION II:

MBSC

1. Vividly imagine that you are afraid of the dentist and have to get some dental work done. Which of the following would you do? Check all of the statements that might apply to you.

- ☐ I would ask the dentist exactly what he/she was going to do.
- ☐ I would take a tranquilizer or have a drink before going.
- ☐ I would try to think about pleasant memories.
- ☐ I would want the dentist to tell me when I would feel pain.
- ☐ I would try to sleep.
- ☐ I would watch all the dentist's movements and listen for the sound of his/her drill.
- ☐ I would watch the flow of water from my mouth to see if it contained blood.
- ☐ I would do mental puzzles in my mind.

2. Vividly imagine that you are being held hostage by a group of armed terrorists in a public building. Which of the following would you do? Check all of the statements that might apply to you.

- ☐ I would sit by myself and have as many daydreams and fantasies as I could.
- ☐ I would stay alert and try to keep myself from falling asleep.
- ☐ I would exchange life stories with the other hostages.
- ☐ If there was a radio present, I would stay near it and listen to the bulletins about what the police were doing.
- ☐ I would watch every movement of my captors and keep an eye on their weapons.
- ☐ I would try to sleep as much as possible.
- ☐ I would think about how nice it's going to be when I get home.
- ☐ I would make sure I knew where every possible exit was.

3. Vividly imagine that, due to a large drop in sales, it is rumoured that several people in your department at work will be laid off. Your supervisor has turned in an evaluation of your work for the past year. The decision about layoffs has been made and will be announced in several days. Check all of the statements that might apply to you.

- ☐ I would talk to my fellow workers to see if they knew anything about what the supervisor's evaluation of me said.
- ☐ I would review the list of duties for my present job and try to figure out if I had fulfilled them all.
- ☐ I would go to the movies to take my mind off things.
- ☐ I would try to remember any arguments or disagreements I might have had with the supervisor that would have lowered his/her opinion of me.
- ☐ I would push all thoughts of being laid off out of my mind.
- ☐ I would tell my spouse (or significant other/close friend) that I'd rather not discuss my chances of being laid off.
- ☐ I would try to think which employees in my department the supervisor might have thought had done the worst job.
- ☐ I would continue doing my job as if nothing special was happening.

4. Vividly imagine that you are on an airplane, thirty minutes from your destination, when the plane unexpectedly goes into a deep dive and then suddenly levels off. After a short time, the pilot announces that nothing is wrong, although the rest of the ride may be rough. You, however, are not convinced that all is well. Check all of the statements that might apply to you.

- ☐ I would carefully read the information provided about safety features in the plane and make sure I knew where the emergency exits were.
- ☐ I would make small talk with the passenger beside me.
- ☐ I would watch the end of the movie, even if I had seen it before.
- ☐ I would call for the steward/stewardess and ask him/her exactly what the problem was.
- ☐ I would order a drink or tranquilizer from the steward/stewardess.
- ☐ I would listen carefully to the engines for unusual noises and would watch the crew to see if their behaviour was out of the ordinary.
- ☐ I would talk to the passenger beside me about what might be wrong.
- ☐ I would settle down and read a book or magazine or write a letter.

SECTION III:

PSS

The questions that follow ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling *how often* you felt or thought a certain way.

0= *Never* 1= *Almost Never* 2= *Sometimes* 3= *Fairly Often* 4= *Very Often*

1.	In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
2.	In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3.	In the last month, how often have you felt nervous and "stressed"?	0	1	2	3	4
4.	In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
5.	In the last month, how often have you felt that things were going your way?	0	1	2	3	4
6.	In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
7.	In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
8.	In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
9.	In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4
10.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

STAI-YI

A number of statements which people have used to describe themselves are given below. Please read each statement and indicate by circling the most appropriate number on the rating scale below how you *feel at present*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

1= Not At All 2= Somewhat 3= Moderately So 4= Very Much So

1. I feel calm.	1	2	3	4
2. I feel secure.	1	2	3	4
3. I am tense.	1	2	3	4
4. I feel strained.	1	2	3	4
5. I feel at ease.	1	2	3	4
6. I feel upset.	1	2	3	4
7. I am presently worrying over possible misfortunes.	1	2	3	4
8. I feel satisfied.	1	2	3	4
9. I feel frightened.	1	2	3	4
10. I feel comfortable.	1	2	3	4
11. I feel self-confident.	1	2	3	4
12. I feel nervous.	1	2	3	4
13. I am jittery.	1	2	3	4
14. I feel indecisive.	1	2	3	4
15. I am relaxed.	1	2	3	4
16. I feel content.	1	2	3	4
17. I am worried.	1	2	3	4
18. I feel confused.	1	2	3	4
19. I feel steady.	1	2	3	4
20. I feel pleasant.	1	2	3	4

STAI-Y2

A number of statements which people have used to describe themselves are given below. Please read each statement and indicate by circling the most appropriate number on the rating scale below how you generally or typically *feel*.

1= Almost Never 2= Sometimes 3= Often 4= Almost Always

21. I feel pleasant.	1	2	3	4
22. I feel nervous and restless.	1	2	3	4
23. I feel satisfied with myself.	1	2	3	4
24. I wish I could be as happy as others seem to be.	1	2	3	4
25. I feel like a failure.	1	2	3	4
26. I feel rested.	1	2	3	4
27. I am "calm, cool, and collected".	1	2	3	4
28. I feel that difficulties are piling up so that I cannot overcome them.	1	2	3	4
29. I worry too much over something that really doesn't matter.	1	2	3	4
30. I am happy.	1	2	3	4
31. I have disturbing thoughts.	1	2	3	4
32. I lack self-confidence.	1	2	3	4
33. I feel secure.	1	2	3	4
34. I make decisions easily.	1	2	3	4
35. I feel inadequate.	1	2	3	4
36. I am content.	1	2	3	4
37. Some unimportant thought runs through my mind and bothers me.	1	2	3	4
38. I take disappointments so keenly that I can't put them out of my mind.	1	2	3	4
39. I am a steady person.	1	2	3	4
40. I get in a state of tension or turmoil as I think over my recent concerns and interests.	1	2	3	4

SECTION IV:

JS-JDI

Think of your job in general. What is it like most of the time?

In the blank beside each word write:

- Y** for "Yes" if it describes your job
N for "No" if it does NOT describe your job, or
? if you cannot decide.

JOB IN GENERAL

- _____ Pleasant
- _____ Bad
- _____ Ideal
- _____ Waste of Time
- _____ Good
- _____ Undesirable
- _____ Worthwhile
- _____ Acceptable
- _____ Like to Leave
- _____ Better than most
- _____ Disagreeable
- _____ Makes me content
- _____ Inadequate
- _____ Excellent
- _____ Rotten
- _____ Enjoyable
- _____ Poor

RCAOS

Please indicate using the following scale, the extent to which each item is descriptive of your present work situation. Please circle your response.

[illegible]

1.	I receive an assignment without the manpower to complete it.	1	2	3	4	5	6	7
2.	I am given enough time to do what is expected of me on my job.	1	2	3	4	5	6	7
3.	It seems like I have too much work for one person to do.	1	2	3	4	5	6	7
4.	On my present job, the amount of work seems to interfere with how well I can do the job.	1	2	3	4	5	6	7
5.	I often notice a marked increase in my work load.	1	2	3	4	5	6	7
6.	I have to do things that should be done differently.	1	2	3	4	5	6	7
7.	I work with two or more groups who operate quite differently.	1	2	3	4	5	6	7
8.	I receive incompatible requests from two or more people.	1	2	3	4	5	6	7
9.	I do things that are apt to be accepted by one person and not accepted by others.	1	2	3	4	5	6	7
10.	I work on unnecessary things.	1	2	3	4	5	6	7
11.	I feel certain about how much authority I have.	1	2	3	4	5	6	7
12.	I have clear, planned goals and objectives for my job.	1	2	3	4	5	6	7
13.	I know I have divided my time properly.	1	2	3	4	5	6	7
14.	I know exactly what is expected of me.	1	2	3	4	5	6	7
15.	Explanation is clear of what has to be done.	1	2	3	4	5	6	7

POS

Below you will find a number of statements about the organization for which you work, each of which you may agree or disagree with depending on your own personal evaluation. Please indicate your degree of agreement or disagreement with each statement by circling a number from 1 to 7 according to the following scale.

1	2	3	4	5	6	7
<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Mildly Disagree</i>	<i>Neither Agree or Disagree</i>	<i>Mildly Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>

1.	The organization values my contribution to its well-being.	1	2	3	4	5	6	7
2.	If the organization could hire someone to replace me at a lower level, it would do so.	1	2	3	4	5	6	7
3.	The organization fails to appreciate any extra effort from me.	1	2	3	4	5	6	7
4.	The organization strongly considers my goals and values.	1	2	3	4	5	6	7
5.	The organization would ignore any complaint from me.	1	2	3	4	5	6	7
6.	The organization disregards my best interests when it makes decisions which affect me.	1	2	3	4	5	6	7
7.	Help is available from my organization when I have a problem.	1	2	3	4	5	6	7
8.	The organization really cares about my well-being.	1	2	3	4	5	6	7

OC

Below you will find a number of statements about the organization for which you work, each of which you may agree or disagree with depending on your own personal evaluation. Please indicate your degree of agreement or disagreement with each statement by circling a number from 1 to 7 according to the following scale.

1	2	3	4	5	6	7
<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Mildly Disagree</i>	<i>Neither Agree or Disagree</i>	<i>Mildly Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>

1.	I feel a strong sense of belonging to my organization.	1	2	3	4	5	6	7
2.	I do not feel emotionally attached to this organization.	1	2	3	4	5	6	7
3.	This organization has a great deal of personal meaning for me.	1	2	3	4	5	6	7
4.	I do not feel like "part of the family" at this organization.	1	2	3	4	5	6	7
5.	I would be happy to spend the rest of my career with this organization.	1	2	3	4	5	6	7
6.	I enjoy discussing my organization with people outside it.	1	2	3	4	5	6	7
7.	I really feel as if this organization's problems are my own.	1	2	3	4	5	6	7
8.	I think I could easily become as attached to another organization as I am to this one.	1	2	3	4	5	6	7
9.	Right now staying with my organization is a matter of necessity as much as desire.	1	2	3	4	5	6	7
10.	One of the reasons I continue to work for this organization is that leaving would require considerable personal sacrifice -- another organization would not match the overall benefits I have.	1	2	3	4	5	6	7
11.	I feel I have too few options to consider leaving this organization.	1	2	3	4	5	6	7
12.	One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.	1	2	3	4	5	6	7

Below you will find a number of statements about the organization for which you work, each of which you may agree or disagree with depending on your own personal evaluation. Please indicate your degree of agreement or disagreement with each statement by circling a number from 1 to 7 according to the following scale.

1	2	3	4	5	6	7
<i>Strongly</i>	<i>Disagree</i>	<i>Mildly</i>	<i>Neither</i>	<i>Mildly</i>	<i>Agree</i>	<i>Strongly</i>
<i>Disagree</i>		<i>Disagree</i>	<i>Agree or</i>	<i>Agree</i>		<i>Agree</i>
			<i>Disagree</i>			

13.	It would be hard for me to leave my organization right now, even if I wanted to.	1	2	3	4	5	6	7
14.	Too much of my life would be disrupted if I decided I wanted to leave my organization now.	1	2	3	4	5	6	7
15.	It wouldn't be too costly for me to leave my organization in the future.	1	2	3	4	5	6	7
16.	I'm not afraid of what would happen if I quit my job without having another lined up.	1	2	3	4	5	6	7

PC

Please indicate by circling the number in the rating scale which most accurately indicates how much you agree or disagree with the following statements.

1= *Strongly disagree* 2= *Disagree* 3= *Agree* 4= *Strongly Agree*

1.	I have enough power in this organization to control events that might affect my job.	1	2	3	4
2.	In this organization, I can prevent negative things from affecting my work situation.	1	2	3	4
3.	I understand this organization well enough to be able to control things that affect me.	1	2	3	4

The next series of questions are concerned with issues directly related to the recent downsizing/restructuring initiatives that all federal government public servants are going through. Please read each of the following questions and indicate by circling your response on the rating scales that correspond to the question. Please read each scale carefully as the descriptors and anchors vary for the different questions.

1. What is the likelihood that you would be facing a job loss arising from "downsizing" over the next 3 years?

1	2	3	4	5	6	7	8	9	10
NOT AT ALL									VERY LIKELY/ ALMOST CERTAINLY
LIKELY									

2. Suppose you were to be laid off/downsized. If so, how well do you think the assistance management actually offered those laid off would provide for your needs.

1	2	3	4	5	6	7	8	9	10
NOT AT ALL								A GREAT DEAL	

3. How likely is it that you will be in the same job next year?

1	2	3	4	5	6	7	8	9	10
VERY UNLIKELY/ NO CHANCE OF STAYING								VERY LIKELY/ WILL DEFINITELY STAY	

4. How likely is it that you will be in the same type of work next year?

1	2	3	4	5	6	7	8	9	10
VERY UNLIKELY/ NO CHANCE								VERY LIKELY/ DEFINITELY	

A number of statements which people have used to describe how and what they do with respect to downsizing/restructuring in organizations are given below.

Please read each of the following 5 statements and indicate by circling on a 5-point scale the extent to which you agree or disagree that the statement *describes your own behaviour*.

1 2 3 4 5
Strongly *Strongly*
Agree *Disagree*

1.	Wherever the restructuring/downsizing takes me, I'm sure I can handle it.	1	2	3	4	5
2.	I get nervous that I may not be able to do all that is demanded of me by the restructuring/ downsizing.	1	2	3	4	5
3.	I have reason to believe I may not perform well in my job situation following the restructuring/downsizing.	1	2	3	4	5
4.	Though I may need some training, I have little doubt I can perform well following the restructuring/downsizing.	1	2	3	4	5
5.	I try to look at the restructuring/ downsizing as an opportunity.	1	2	3	4	5

Please read each of the following 8 statements and indicate by circling on a 5-point scale the extent to which the statement is *characteristic or uncharacteristic of your own behaviour*.

1 2 3 4 5
Very *Very*
Characteristic *Uncharacteristic*

1.	I focus on my current job and try to think about the restructuring/downsizing as little as possible.	1	2	3	4	5
2.	I read everything I can get to try to understand the restructuring/downsizing.	1	2	3	4	5
3.	I share worries and anxieties with others in the same position as me.	1	2	3	4	5
4.	I seek out information from various sources about the restructuring/ downsizing and its implications.	1	2	3	4	5
5.	I share my worries with close coworkers.	1	2	3	4	5
6.	I don't even think about the restructuring/downsizing.	1	2	3	4	5
7.	I share my worries with friends outside the work setting and/or my spouse.	1	2	3	4	5
8.	I cope by forgetting about the restructuring/downsizing until it happens to me.	1	2	3	4	5

For the following questions, please circle the number on the following scales that best describe your present situation or personal perspective.

1. How do you rate the opportunities for alternative employment outside of your organization?

1	2	3	4	5
absolutely				excellent opportunities
no opportunities				

2. How transferable/useful do you feel your skills are to another organization?

1	2	3	4	5
not at all				very transferable
transferable				

3. To what extent are you the major breadwinner in your home?

1	2	3	4	5
not at all				a great deal

4. To what extent do you feel prepared to look for alternative employment? (For example, you have/ or can have a current resume, you are familiar with job search techniques, you are prepared for interview questions).

1	2	3	4	5
not at all				very prepared
prepared				

HBC

Please indicate how often each of the following items describe your *typical behaviour*. Responses may range from 0 (never do this, not typical of me) to 4 (extremely typical of me, do this almost always).

0	1	2	3	4		
Never/ Not Typical	Rarely	Sometimes	Often	Always/ Extremely Typical		
1.	I eat a balanced diet.	0	1	2	3	4
2.	I get enough sleep.	0	1	2	3	4
3.	I keep emergency numbers by the phone.	0	1	2	3	4
4.	I choose my spare-time activities to help me relax.	0	1	2	3	4
5.	I take chances when crossing the street.	0	1	2	3	4
6.	I have a first aid kit in my home.	0	1	2	3	4
7.	I destroy old or unused medicines.	0	1	2	3	4
8.	I see a doctor for regular checkups.	0	1	2	3	4
9.	I pray or live by principles of religion.	0	1	2	3	4
10.	I avoid getting chilled.	0	1	2	3	4
11.	I watch my weight.	0	1	2	3	4
12.	I carefully obey traffic rules so I won't have accidents.	0	1	2	3	4
13.	I watch for signs of major health problems (e.g., cancer, hypertension, heart disease).	0	1	2	3	4
14.	I exercise to stay healthy.	0	1	2	3	4
15.	I cross the street against the stop light.	0	1	2	3	4
16.	I avoid high crime areas.	0	1	2	3	4
17.	I don't smoke.	0	1	2	3	4
18.	I don't take chemical substances which might injure my health (e.g., food additives, drugs, stimulants).	0	1	2	3	4
19.	I check the condition of electrical appliances, the car, etc., to avoid accidents.	0	1	2	3	4
20.	I stay away from places where I might be exposed to germs.	0	1	2	3	4
21.	I fix broken things around home right away.	0	1	2	3	4
22.	I see a dentist for regular checkups.	0	1	2	3	4

Please indicate how often each of the following items describe your *typical behaviour*. Responses may range from 0 (never do this, not typical of me) to 4 (extremely typical of me, do this almost always).

0	1	2	3	4			
Never/ Not Typical	Rarely	Sometimes	Often	Almost Always/ Extremely Typical			
23.	I limit my intake of foods like coffee, sugar, fats, etc.		0	1	2	3	4
24.	I avoid over-the-counter medicines.		0	1	2	3	4
25.	I take vitamins.		0	1	2	3	4
26.	I do not drink alcohol.		0	1	2	3	4
27.	I wear a seat belt when in the car.		0	1	2	3	4
28.	I cross busy streets in the middle of the block.		0	1	2	3	4
29.	I avoid areas of high pollution.		0	1	2	3	4
30.	I discuss health with friends, neighbours and/or relatives.		0	1	2	3	4
31.	I gather information on things that affect my health by watching television and reading books, newspapers, or magazine articles.		0	1	2	3	4
32.	I use dental floss regularly.		0	1	2	3	4
33.	I speed while driving.		0	1	2	3	4
34.	I brush my teeth regularly.		0	1	2	3	4
35.	I take health food supplements (e.g., protein additives, wheat germ, bran, lecithin, etc.).		0	1	2	3	4
36.	I learn first aid techniques.		0	1	2	3	4
37.	I get shots to prevent illness.		0	1	2	3	4
38.	I take more chances doing things than the average person.		0	1	2	3	4
39.	I drive after drinking.		0	1	2	3	4
40.	I engage in activities or hobbies where accidents are possible.		0	1	2	3	4

Please indicate any additional health behaviours you feel are relevant and indicate, using the same response scale, how typical they are of you.

Additional health behaviours

How typical of you (indicate scale number)

1. _____

2. _____

3. _____

SECTION VI:

GENERAL INFORMATION

We would like some general information about you. All information will be kept strictly confidential and anonymous and will be used only to describe (in aggregated fashion) the characteristics of individuals who participated in this research. At no times will individuals be identified or information organized or summarized in a fashion that individuals' identities can be determined.

1. Gender: ☐ Male ☐ Female (please check)
2. Age: (in years)
3. Marital Status: (circle answer)
 1. SINGLE (NEVER MARRIED)
 2. MARRIED
 3. SEPARATED/DIVORCED
 4. WIDOW/WIDOWER
 5. OTHER
4. If you have children, how many are living with you that you financially support, or how many do you financially support? NUMBER OF CHILDREN
5. Are you responsible for caring for other people (e.g., elderly persons living with you)
 YES NO
6. What is your present job classification? (Group and level)
7. How long have you been in this position? (years)
8. How long have you been employed in the public service? (years)
9. On average, how many hours a week do you spend working at the office? (hours)
10. On average, how many hours a week do you spend doing work-related work at home? (hours)
11. What is the highest level of education you have received?
12. Have you been identified as an "affected" or "surplus" individual by the government downsizing exercise?
 YES NO
13. Are you planning to take advantage of the ERI/ EDI ? (CHECK ONE)
 YES NO UNDECIDED
14. If yes, which one?
 ERI (Early Retirement Incentive) or EDI (Early Departure Incentive)
15. What is your first language? (CHECK ONLY ONE)

<input type="text"/>	English
<input type="text"/>	French
<input type="text"/>	Other (Please specify) <input type="text"/>

OPEN ENDED:

In this study we have been trying to understand the joys, problems, hassles and benefits of peoples' experience in their job and the relationship between work and other activities one performs in daily life. As well, we have been trying to understand different coping strategies and responses to the recent restructuring/downsizing and job-related stressors. Is there anything else you would like to tell us that would help us understand these issues?

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Do you have any questions or comments on the questionnaires you have completed? Or this kind of research?

Thanks again for your participation and co-operation. If you have any questions or concerns about this research, please feel free to contact us at Carleton University, Department of Psychology.

Mary Anne Robblee

Adapted from Phillips & Little (1993)

COGNITIVE COPING STYLES, JOB INSECURITY, PERSONAL PROJECTS
AND HEALTH

PARTICIPANT DEBRIEFING LETTER

Dear Participant:

Thank you for your participation in this project conducted by Mary Anne Robblee of the Department of Psychology, Carleton University under the supervision of Dr. Mary Gick and Dr. W. Jones. At present, there is a growing body of literature which suggests that person-environment relationships play important and influential roles in stress appraisals, behavioural coping efforts, health practices, and psychological and physical health outcomes. This study represents a test of a model of health for relationships and interactions among cognitive coping styles (i.e., monitoring or blunting), work and non-work characteristics (e.g., personal importance, enjoyment, challenge), and a number of organizational factors (e.g., perceived control, job insecurity).

Your participation will help provide information essential to understanding more fully these complex set of relationships. Further, through this information it will be possible to formulate suggestions for more informed interventions and strategies both inside and outside of organizations. Your participation was very important and greatly appreciated by us.

All your responses are confidential. Your name will never be placed on the questionnaires or associated with the project results. No-one in your work setting or home organization will ever have access to your responses. In the final analysis all data will be aggregated. When all the results have been analyzed, you will receive a summary of the major findings of this study. All results will be reported in statistical form, with no reference to any particular individual.

If you have any questions regarding this study, feel free to contact Mary Anne Robblee at 729-9176 or Dr. Mary Gick at 520-2600 (ext. 2664). The Chairman of the Psychology Department, Dr. W. Jones (ext. 2648) and the Chairman of the Ethics Committee, Dr. L. Paquet (ext. 2692) may be reached at the indicated extension numbers if you have any ethical concerns regarding this study.

I would like to thank you again for your participation and ask that you retain this page for your own records.

Sincerely,

Mary Anne Robblee
Department of Psychology
Carleton University
Ottawa, Ontario

Suggested References

For those who are particularly interested in learning more about some of the research noted earlier, I am providing a brief list of references for your own use.

Ashford, Susan J. (1988). Individual strategies for coping with stress during organizational transitions. Journal of Applied Behavioural Science, 24, 1, 19-36.

Kelloway, E. Kevin., & Barling, Julian. (1991). Job characteristics, role stress and mental health, Journal of Occupational Psychology, 64, 291-304.

Miller, Suzanne M. (1990). To see or not to see: Cognitive informational styles in the coping process. In Michael Rosenbaum (Ed.). Learned Resourcefulness: On Coping Skills, Self-Control and Adaptive Behavior. Springer Publishing Company: New York.

If you are interested in some resource material to help you deal most effectively with stress in general, you may find the following references of value.

Davis, Martha., Eshelman, Elizabeth R., & McKay, Mathew. (1995). The Relaxation & Stress Reduction Workbook (4th Edition). New Harbinger Publications, Inc.: Oakland, CA.

Matteson, Michael T., & Ivancevich, John M. (1987). Controlling Work Stress: Effective Human Resource and Management strategies. Jossey-Bass Inc.: San Francisco, CA.

Lazarus, Richard S., & Lazarus, Bernice N. (1994). Passion & Reason: Making Sense of Our Emotions. Oxford University Press: New York.

APPENDIX J:

Complete Questionnaire Package

(French Version)

STRATÉGIES D'ADAPTATION COGNITIVE, INSÉCURITÉ D'EMPLOI,
PROJETS PERSONNELS ET SANTÉ
LETTRE D'INTRODUCTION À L'INTENTION DES PARTICIPANT(E)S

Cher participant, chère participante,

Nous vous remercions de votre participation à cette étude menée par Mary Anne Robblee du département de psychologie de l'université Carleton, sous la supervision de Mary Gick, Ph.D., et de W. Jones, Ph.D. Ce projet porte sur les joies, problèmes, ennuis et avantages propres au milieu de travail ainsi que sur la relation entre ce dernier et les autres activités quotidiennes. De plus, nous espérons comprendre les pressions inhérentes à votre emploi, étudier la façon dont vous vivez l'expérience de réduction des effectifs et y réagissez, vos stratégies d'adaptation cognitive et comment ces dernières sont reliées à votre santé et votre bien-être général. Votre participation nous fournira des renseignements essentiels à la compréhension globale de ce réseau complexe de relations. De plus, l'information ainsi obtenue nous permettra de formuler des suggestions quant aux interventions et stratégies au sein comme à l'extérieur des organismes. Votre participation est donc des plus importantes et fort appréciée.

Le questionnaire ne cherche pas à tromper qui que ce soit, et votre participation ne devrait pas être pour vous ni menaçante ni embarrassante. Vos réponses demeureront confidentielles et ne seront identifiées que par un numéro d'expérience. Ce dernier ne servira qu'à des fins administratives. Votre nom ne paraîtra jamais sur les questionnaires et ne sera pas associé aux résultats du projet. Aucun(e) collègue de votre milieu de travail ou de votre organisme n'aura accès à vos réponses. Dans l'analyse finale, toutes les données seront compilées.

Afin de garantir une représentation fiable des réactions du personnel de votre organisme, il est très important de vous assurer que tous les questionnaires et toutes les questions soient remplis et remis à madame Mary Anne Robblee. Il n'est toutefois pas nécessaire de répondre aux questions vous paraissant trop personnelles.

Les questionnaires prendront entre 1 et 2 heures au plus à terminer. Voici les directives :

1. Avant de commencer, veuillez lire et remplir le formulaire de consentement informé et le remettre dans l'ensemble. (Un fois que vous l'aurez remis, le formulaire sera détaché de l'ensemble.)
2. Veuillez répondre aux questions et points en respectant l'ordre dans lequel ils vous sont présentés étant donné qu'il est important que tous les participant(e)s vivent l'expérience uniformément.
3. N'hésitez pas à poser des questions sur le questionnaire.

Une fois les données analysées, tous les participant(e)s recevront un sommaire des principaux résultats, ces derniers paraissant sous forme de statistiques, sans aucune référence personnelle.

Si vous avez des questions concernant cette étude, n'hésitez pas à communiquer avec Mary Anne Robblee au 729-9176, ou Mary Gick, Ph.D., 520-2600 (poste 2664). Vous pouvez de plus téléphoner au directeur du département de psychologie, W. Jones, Ph.D. (poste 2648) ainsi qu'au chef du comité d'éthique, L. Paquet, Ph.D., (poste 2692), pour toute question d'éthique.

Je vous remercie à nouveau de votre participation.

Mes salutations les meilleures,

A handwritten signature in black ink, appearing to read 'Ma Robblee'.

Mary Anne Robblee, M.A.
Département de psychologie
Université Carleton
Ottawa (Ontario)

UNIVERSITÉ CARLETON
DÉPARTEMENT DE PSYCHOLOGIE
LABORATOIRES DE PSYCHOLOGIE DE LA SANTÉ
ET DE PSYCHOLOGIE ORGANISATIONNELLE

FORMULAIRE DE CONSENTEMENT INFORMÉ

Titre : Stratégies d'adaptation cognitive, insécurité d'emploi, projets personnels et santé

Investigatrice : Mary Anne Robblee, M.A.

Conseillers académiques : Mary Gick, Ph.D., W. Jones, Ph.D.

Nom du participant/de la participante : _____
(en majuscules)

Cette étude à laquelle j'ai accepté de participer exigera la réponse à des questionnaires. Bien que les directives varient d'un questionnaire à l'autre, elles sont claires. Il n'existe pas de bonnes ou de mauvaises réponses. Je dois simplement répondre le plus sincèrement possible.

Ma participation à cette étude est volontaire et je peux en tout temps me retirer sans avoir à donner de raison.

Je ne suis pas tenu(e) de répondre aux questions que je considère trop personnelles.

Toutes les données personnelles et toutes mes réponses demeureront confidentielles.

En retour de ma participation, je recevrai un sommaire des principaux résultats obtenus dans cette étude.

(signature)

Veillez indiquer l'adresse où faire parvenir le sommaire des résultats, si vous en voulez un.

Date : _____

SECTION I : ANALYSE DES PROJETS PERSONNELS

Nous souhaitons étudier les types d'activités et d'inquiétudes qui marquent les gens à diverses étapes de leur vie. Nous les nommerons *projets personnels*. Nous avons tous des projets auxquels nous réfléchissons à un moment donné, que nous planifions, exécutons et, à l'occasion (bien que pas toujours), terminons. En ce sens, il se peut que nos projets soient en cours ou qu'ils soient terminés; il est possible que ce soient des tâches que nous choisissons d'exécuter ou que nous devons exécuter. Pensez à vos projets ainsi. Nous sommes particulièrement intéressés aux projets reliés à votre travail, à la maison, à vos loisirs et à la communauté.

Voici quelques exemples de projets :

- Obtenir mon diplôme
- Passer plus de temps avec mes enfants
- Organiser le bazar des Grandes soeurs/Grands frères
- Nettoyer le garage
- Terminer le rapport pour mon directeur/ma directrice
- M'entendre mieux avec mes collègues
- Essayer de me motiver/de motiver les autres
- Postuler un emploi
- Faire davantage d'exercice à l'extérieur
- Perdre dix livres
- Essayer de terminer la lecture d'un livre prêté par un(e) ami(e)
- Redécorer le sous-sol
- Tenter de mieux définir mes croyances religieuses
- Fabriquer un cadeau d'anniversaire pour un(e) ami(e)

Nous voulons également connaître votre réaction envers ces projets personnels : s'ils vous sont agréables, etc. Commencez donc par prendre quelques minutes pour écrire tous les projets personnels dans lesquels vous êtes présentement engagé(e). Rappelez-vous qu'il n'est pas nécessaire que vos projets soient officiels ou importants; nous préférons connaître les activités ou préoccupations qui marquent votre vie quotidienne.

Liste des projets

Énumérez autant de projets personnels que possible au cours des prochaines minutes. N'accordez pas plus de dix minutes à cette section.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Matrices d'évaluation des projets

Maintenant que vous avez énuméré vos projets, nous vous demanderons de les diviser en deux catégories : **les projets reliés à votre travail et les autres.**

Choisissez d'abord les cinq **projets reliés à votre travail** qui vous semblent les plus pertinents pour aider à mieux comprendre votre milieu de travail. Il ne s'agit pas nécessairement des projets ou activités les plus difficiles ou les plus importants. Résumez ces projets le plus brièvement possible sur la page intitulée **MATRICE DES PROJETS PERSONNELS**. Si vous avez plus de cinq projets, choisissez les cinq qui vous semblent le mieux décrire votre relation avec votre univers de travail. Si vous avez moins de cinq projets, songez à d'autres activités reliées au travail pour porter votre liste à cinq.

Choisissez maintenant cinq **projets non reliés au travail** qui vous semblent les plus pertinents pour aider à comprendre cet aspect de votre vie et inscrivez-les sous la liste des projets reliés au travail. Si vous avez plus de cinq projets, choisissez les cinq qui vous semblent le mieux décrire vos activités. Si vous avez moins de cinq projets non reliés au travail, songez à d'autres activités pour porter votre liste à cinq.

La description de chaque **projet relié au travail ou autre** doit être juste assez longue pour bien définir l'activité. Il est important que tous fournissent les **5 projets reliés au travail et les 5 projets non reliés au travail**.

☛ Consultez maintenant la liste des dimensions et leurs descriptions ("Projets personnels: Dimensions & Descriptions") dans les pages suivantes et évaluez chacun de vos projets en vous servant de n'importe quel chiffre de 0 à 10 pour chaque facteur inscrit. Rappelez-vous que vous pouvez utiliser le chiffre entre 0 et 10 qui vous semble le plus indiqué.

RETOURNEZ LE AVEC LE QUESTIONNAIRE D'EMENT REMPLI.

Projets personnels

MATRICE DE L'APP

	Importance	Plaisir	Difficulté	Contrôle	Initiation	Stress	Facteur temps	Résultat	Identité personnelle	Point de vue des autres	Conformité aux valeurs	Impact positif	Impact négatif	Progrès	Défi	Engagement	Absorption	Compétence	Appui	Etat affectif	Force de cet état	Appui de la culture	Intérêt de la culture
1.																							
2.																							
3.																							
4.																							
5.																							
Projets non reliés au travail	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
6.																							
7.																							
8.																							
9.																							
10.																							

Évaluez chacun de vos projets à l'aide de n'importe quel chiffre de 0 à 10 pour chaque dimension. Ajoutez votre propre évaluation sous chaque dimension de la **MATRICE DES PROJETS PERSONNELS**. Vous pouvez utiliser le chiffre entre 0 et 10 qui vous semble le plus indiqué.

Exemple d'échelle :

0	1	2	3	4	5	6	7	8	9	10
Pas du tout										Énormément

1. Importance : L'importance du projet pour vous à ce moment-ci (10 si le projet vous est très important et 0 s'il ne l'est pas).
2. Plaisir : Le plaisir éprouvé à travailler à ce projet (10 si vous aimez énormément cette activité, 0 si vous n'en tirez aucun plaisir).
3. Difficulté : Le niveau de difficulté du projet (10 pour un projet très difficile à mener à bien, 0 pour un projet qui ne vous semble pas difficile).
4. Contrôle : Le degré de contrôle que vous avez par rapport au projet (10 si vous croyez être en charge, 0 si vous pensez n'avoir aucun contrôle de la situation).
5. Initiation : Le degré de responsabilité du lancement de ce projet (10 si vous croyez avoir entièrement lancé le projet, 0 si vous n'avez rien eu à voir avec le lancement du projet).
6. Stress : Le niveau de stress éprouvé au cours du projet (10 si vous ressentez énormément de stress lors de l'exécution du projet, 0 si vous êtes très à l'aise).
7. Facteur temps : La pression éprouvée en raison du délai imparti pour le projet (10 si le délai vous tracasse énormément, 0 si vous n'éprouvez aucune pression de ce genre à exécuter le projet).
8. Résultat : Le résultat éventuel du projet (10 si vous croyez que le projet sera des plus réussis, 0 si le projet vous semble voué à l'échec).

9. Identité personnelle: Nous possédons tous des caractéristiques qui nous sont propres que nous appelons communément "style personnel" ou "marques caractéristiques". Ainsi, certaines personnes s'adonnent à tous les sports possibles, d'autres préfèrent lire, alors que d'autres aiment sortir avec des amis. Songez à ce qui caractérise votre propre "style" et évaluez chaque projet en fonction de ses possibilités d'expression personnelle (10 si le projet vous représente parfaitement, 0 si le projet ne reflète rien qui vous est propre).
10. Point de vue des autres : L'importance de chaque projet pour les personnes près de vous, au travail ou à la maison (10 si le projet semble très important pour vos proches, 0 si tel n'est pas le cas).
11. Conformité aux valeurs : Jusqu' où chaque projet reflète vos valeurs personnelles (10 si le projet est parfaitement conforme à vos valeurs, 0 s'il existe un contraste flagrant).
12. Impact positif : L'impact positif de chaque projet sur les autres, qu'il leur nuise ou non (une autre section se penchera sur l'impact négatif). Utilisez 10 si le projet accroît vos chances de travailler à d'autres projets, 0 pour indiquer qu'il n'a pas d'effet positif).
13. Impact négatif : L'impact négatif de chaque projet sur les autres (10 pour indiquer qu'un projet nuit sérieusement à vos chances de travailler à d'autres projets, 0 s'il n'a pas d'effet négatif).
14. Progrès : Votre degré de succès dans le projet à ce jour (10 si vous avez bien réussi, 0 si vous n'avez obtenu aucun succès).
15. Défi : L'intensité du défi que représente chaque projet (10 pour un projet représentant un défi important, 0 pour l'inverse).
16. Engagement : La mesure dans laquelle vous vous êtes engagé(e) envers la réussite du projet (10 si vous êtes très engagé(e), 0 si vous ne l'êtes pas).
17. Absorption : Le niveau de votre absorption par le projet (10 si vous vous lancez généralement à fond dans toute activité, 0 si vous tendez à ne pas vous laisser absorber).

18. Compétence : Le niveau de compétence que vous possédez par rapport au projet (10 si vous croyez posséder les compétences nécessaires à la réussite du projet, 0 si vous ne croyez pas avoir ces compétences).
19. Appui : L'appui que vous sentez recevoir des autres. Pour les projets concernant le travail, ceci comprend les superviseurs et collègues; pour les projets non reliés au travail, ceci comprend les membres de votre famille ou les ami(e)s (10 si vous croyez que les autres appuient entièrement ce projet, 0 si vous ne sentez aucun appui).
- 20a. État affectif : Il arrive que nous ressentions diverses émotions face à une situation, des émotions telles que fierté, joie, excitation, anxiété, peur, affection, cynisme, ennui, espoir, colère, regret, amertume et enthousiasme.
 ➡ **Réfléchissez à ce que vous ressentez face à ce projet et inscrivez votre émotion dans l'espace réservé à cette fin.**
- 20b. Force de cet état : Quelle est la force de cette émotion dans le cadre d'un projet? (Utilisez 10 si cette émotion est intense, 5 modérée et 0 faible.)

Projets reliés au travail seulement

21. Appui de la culture : Dans quelle mesure considérez-vous que la culture (l'atmosphère, le climat) de votre organisme appuie ce projet? (10 si ce projet reçoit un appui total, 0 s'il ne reçoit aucun appui.)
22. Interférence de la culture : Dans quelle mesure considérez-vous que la culture (l'atmosphère, le climat) de votre organisme nuit à ce projet? (10 si la culture nuit au projet, 0 si tel n'est pas le cas du tout.)

SECTION II :

MBSC

1. Imaginez que vous avez peur du (de la) dentiste et que vous devez vous faire faire un traitement dentaire. Lesquelles des déclarations suivantes décrivent votre réaction? Cochez toutes les phrases qui pourraient s'appliquer à vous.

- ☐ Je demanderais au (à la) dentiste d'expliquer exactement ce qu'il (elle) compte faire.
- ☐ Je prendrais un tranquillisant ou je boirais quelque chose avant d'y aller.
- ☐ J'essaierais de penser à des souvenirs agréables.
- ☐ J'aimerais que le (la) dentiste me signale les moments de douleur à l'avance.
- ☐ J'essaierais de dormir.
- ☐ Je regarderais attentivement tous les gestes du (de la) dentiste et j'attendrais d'entendre le son de la fraise.
- ☐ Je regarderais l'eau qui sort de ma bouche pour voir s'il y a des traces de sang.
- ☐ Je ferais des casse-tête mentaux.

2. Imaginez que vous avez été pris(e) en otage dans un édifice public par un groupe de terroristes armés. Lesquelles des déclarations suivantes décrivent votre réaction? Cochez toutes les phrases qui pourraient s'appliquer à vous.

- ☐ Je resterais assis(e) dans mon coin et je tenterais de me perdre en rêveries.
- ☐ Je resterais éveillé(e) et j'essaierais de ne pas dormir.
- ☐ Je raconterais ma vie à d'autres otages et j'écouterais la leur.
- ☐ S'il y avait une radio, je resterais tout près et j'écouterais les bulletins sur les activités de la police.
- ☐ Je guetterais chaque geste des preneurs d'otages et je tiendrais leurs armes à l'oeil.
- ☐ J'essaierais de dormir le plus possible.
- ☐ Je penserais au plaisir que j'aurais avoir une fois rentré(e) à la maison.
- ☐ Je m'assurerais de l'emplacement de chaque sortie possible.

3. Imaginez que, à la suite d'une baisse importante des ventes, la rumeur veut que plusieurs personnes dans votre section seront mises à pied. Votre superviseur(e) a remis une évaluation de votre travail depuis un an. La décision quant aux mises à pied a déjà été prise et sera annoncée dans quelques jours. Cochez toutes les phrases qui pourraient s'appliquer à vous.

- ☐ Je parlerais à mes camarades de travail pour voir s'ils savent des choses sur l'évaluation présentée par mon (ma) superviseur(e).
- ☐ Je reverrais la liste des tâches reliées à mon poste actuel pour voir si je les ai toutes faites.
- ☐ J'irais au cinéma pour me changer les idées.
- ☐ J'essaierais de me rappeler toutes les discussions ou différences d'opinion que j'aurais pu avoir avec mon (ma) superviseur(e) et qui auraient pu me faire baisser dans son estime.
- ☐ Je bannirais de mes pensées toute idée de mise à pied.
- ☐ Je dirais à mon conjoint/ma conjointe ou à un(e) ami(e) intime que j'aimerais mieux ne pas discuter de mes chances d'être mis(e) à pied.
- ☐ J'essaierais de penser aux personnes de ma section qui auraient pu travailler le moins bien, selon le (la) superviseur(e).
- ☐ Je continuerais à travailler comme si de rien n'était.

4. Imaginez que vous êtes en avion, à trente minutes de votre destination, quand l'avion plonge tout à coup pour ensuite se redresser et continuer son vol. Bientôt, le pilote annonce que tout va bien, mais qu'il y aura de la turbulence pendant le reste du vol. Cependant, vous n'êtes pas convaincu(e) que tout aille bien. Cochez toutes les phrases qui pourraient s'appliquer à vous.

- ☐ Je lirais soigneusement les renseignements sur les procédures de sécurité et je m'assurerais de l'emplacement des sorties de secours.
- ☐ Je parlerais de tout et de rien avec la personne dans le siège à côté.
- ☐ Je regarderais le film jusqu'à la fin, même si je l'avais déjà vu.
- ☐ Je ferais venir l'agent de bord et je lui demanderais exactement ce qui est arrivé.
- ☐ Je commanderais une boisson alcoolisée ou un tranquillisant à l'agent de bord.
- ☐ Je guetterais tout bruit étrange des moteurs et je surveillerais les membres de l'équipage pour voir s'ils se comportent normalement.
- ☐ Je parlerais avec mon/ma voisin(e) des problèmes possibles.
- ☐ Je me calmerais en lisant un livre ou une revue ou en écrivant une lettre.

SECTION III :

PSS

Les questions suivantes vous interrogent sur vos sentiments et vos pensées au cours du dernier mois. Dans chaque cas, on vous demande d'indiquer *la fréquence* de ces sentiments ou de ces pensées.

0= *jamais* 1= *presque jamais* 2= *parfois* 3= *assez souvent* 4= *très souvent*

1.	Au cours du dernier mois, je me suis fâché(e) à cause d'un événement imprévu.	0	1	2	3	4
2.	Au cours du dernier mois, j'ai eu le sentiment de ne pas pouvoir contrôler les choses importantes dans ma vie.	0	1	2	3	4
3.	Au cours du dernier mois, je me suis senti(e) nerveux (nerveuse) et stressé(e).	0	1	2	3	4
4.	Au cours du dernier mois, je me suis senti(e) sûr(e) de pouvoir m'occuper de mes problèmes personnels.	0	1	2	3	4
5.	Au cours du dernier mois, j'ai eu le sentiment que les choses allaient bien pour moi.	0	1	2	3	4
6.	Au cours du dernier mois, j'ai trouvé que je n'arrivais pas à faire tout ce que j'avais à faire.	0	1	2	3	4
7.	Au cours du dernier mois, j'ai pu contrôler les irritations dans ma vie.	0	1	2	3	4
8.	Au cours du dernier mois, j'ai eu le sentiment de m'en sortir très bien.	0	1	2	3	4
9.	Au cours du dernier mois, j'ai été fâché(e) pour des choses que je ne contrôlais pas.	0	1	2	3	4
10.	Au cours du dernier mois, j'ai eu le sentiment que les difficultés s'accumulaient au point que je ne pouvais pas les surmonter.	0	1	2	3	4

STAI-YI

Ci-dessous, vous trouverez un certain nombre de phrases que les gens emploient pour se décrire. Veuillez lire chaque phrase et encrer le chiffre qui indique le mieux à quel point cette déclaration décrit votre état actuel. Il n'y a ni bonne ni mauvaise réponse. Ne passez pas trop de temps sur chaque déclaration mais indiquez, pour chacune, quel chiffre indique le mieux votre état actuel.

1= pas du tout 2= quelque peu 3= pas mal 4= beaucoup

1.	Je me sens calme.....	1	2	3	4
2.	Je me sens en sécurité.....	1	2	3	4
3.	Je me sens tendu(e).....	1	2	3	4
4.	Je me sens sous pression.....	1	2	3	4
5.	Je me sens à l'aise.....	1	2	3	4
6.	Je me sens fâché(e).....	1	2	3	4
7.	J'ai des inquiétudes au sujet de malheurs possibles.....	1	2	3	4
8.	Je me sens satisfait(e).....	1	2	3	4
9.	Je me sens effrayé(e).....	1	2	3	4
10.	Je suis bien dans ma peau.....	1	2	3	4
11.	Je me sens sûr(e) de moi.....	1	2	3	4
12.	Je me sens nerveux (nerveuse).....	1	2	3	4
13.	Je me sens agité(e).....	1	2	3	4
14.	Je me sens indécis(e).....	1	2	3	4
15.	Je me sens détendu(e).....	1	2	3	4
16.	Je me sens content(e).....	1	2	3	4
17.	Je suis inquiet (inquiète).....	1	2	3	4
18.	Je me sens perdu(e).....	1	2	3	4
19.	Je me sens stable.....	1	2	3	4
20.	Je me sens bien	1	2	3	4

STAI-Y2

Ci-dessous, vous trouverez un certain nombre de phrases que les gens emploient pour se décrire. Veuillez lire chaque déclaration et encrer le chiffre qui indique à quel point cette déclaration décrit votre état général ou typique.

1= presque jamais 2= parfois 3= souvent 4= presque toujours

21.	Je me sens bien.....	1	2	3	4
22.	Je me sens nerveux (nerveuse) et troublé(e).....	1	2	3	4
23.	Je suis satisfait(e) de moi.....	1	2	3	4
24.	J'aimerais être aussi heureux (heureuse) que d'autres semblent l'être.....	1	2	3	4
25.	Je me vois comme un(e) raté(e).....	1	2	3	4
26.	Je me sens reposé(e).....	1	2	3	4
27.	Je suis calme et posé(e).....	1	2	3	4
28.	J'ai le sentiment que les difficultés s'accumulent au point que je ne peux pas les surmonter.....	1	2	3	4
29.	Je m'inquiète trop de ce qui n'est pas important au fond....	1	2	3	4
30.	Je suis heureux (heureuse).....	1	2	3	4
31.	J'ai des pensées troublantes.....	1	2	3	4
32.	Je manque de confiance en moi.....	1	2	3	4
33.	Je me sens en sécurité.....	1	2	3	4
34.	Je prends facilement des décisions.....	1	2	3	4
35.	Je me sens insuffisant(e).....	1	2	3	4
36.	Je suis content(e).....	1	2	3	4
37.	Une pensée peu importante me vient à l'esprit et me tracasse.....	1	2	3	4
38.	Je réagis si profondément aux désappointements que je ne peux pas m'empêcher d'y penser.....	1	2	3	4
39.	Je suis une personne stable.....	1	2	3	4
40.	Je deviens tendu(e) ou tourmenté(e) à force de réfléchir à mes soucis et intérêts récents.....	1	2	3	4

SECTION IV :

JS-JDI

Pensez à votre travail en général. Comment est-il la plupart du temps?

Sur le tiret à côté de chaque description, inscrivez :

- O** pour "Oui" si c'est une bonne description de votre travail
N pour "Non" si ce n'est pas une bonne description de votre travail
? si vous ne pouvez pas décider

TRAVAIL EN GÉNÉRAL

- _____ agréable
- _____ mauvais
- _____ idéal
- _____ perte de temps
- _____ bon
- _____ indésirable
- _____ valable
- _____ acceptable
- _____ j'aimerais quitter
- _____ mieux que la plupart
- _____ désagréable
- _____ me satisfait
- _____ insuffisant
- _____ excellent
- _____ pourri
- _____ plaisant
- _____ médiocre

RCAOS

Veillez indiquer, selon l'échelle suivante, à quel point chaque déclaration décrit votre situation actuelle au travail. Veuillez encrer votre réponse.

	1	2	3	4	5	6	7
	<i>absolument faux</i>					<i>absolument vrai</i>	
1.	On me demande d'accomplir une tâche sans que je dispose du personnel nécessaire pour la mener à bien.....	1	2	3	4	5	6 7
2.	On me donne assez de temps pour faire ce qu'on attend de moi au travail.....	1	2	3	4	5	6 7
3.	On dirait que j'ai trop de travail pour une seule personne....	1	2	3	4	5	6 7
4.	À mon poste actuel, la quantité de travail semble m'empêcher d'assurer la qualité du travail.....	1	2	3	4	5	6 7
5.	Je constate souvent une augmentation marquée de la charge de travail.....	1	2	3	4	5	6 7
6.	J'ai à faire des choses qui devraient être faites autrement....	1	2	3	4	5	6 7
7.	Je travaille avec deux ou plusieurs groupes qui fonctionnent différemment.....	1	2	3	4	5	6 7
8.	Je reçois des demandes incompatibles de deux personnes ou plus.....	1	2	3	4	5	6 7
9.	Les choses que je fais sont susceptibles d'être acceptées par une personne et pas par d'autres.....	1	2	3	4	5	6 7
10.	Je travaille sur des choses inutiles.....	1	2	3	4	5	6 7
11.	Je me sens certain(e) de mon autorité.....	1	2	3	4	5	6 7
12.	J'ai des buts et objectifs clairs et bien planifiés pour mon travail.....	1	2	3	4	5	6 7
13.	Je sais que j'ai divisé mon temps comme il faut.....	1	2	3	4	5	6 7
14.	Je sais exactement ce qu'on attend de moi.....	1	2	3	4	5	6 7
15.	Ce qu'il faut faire est clairement expliqué.....	1	2	3	4	5	6 7

POS

Ci-dessous, vous trouverez un certain nombre de déclarations sur l'organisme pour lequel vous travaillez. Vous pouvez être d'accord ou ne pas être d'accord avec chacune selon votre évaluation personnelle. Veuillez indiquer à quel point vous êtes d'accord ou en désaccord avec chaque déclaration en encerclant un chiffre de 1 à 7 selon l'échelle suivante.

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
<i>complètement en désaccord</i>	<i>en désaccord</i>	<i>plus ou moins en désaccord</i>	<i>ni d'accord ni en désaccord</i>	<i>plus ou moins d'accord</i>	<i>d'accord</i>	<i>complètement d'accord</i>
1.	Cet organisme apprécie la contribution que je fais à son bien-être.....					1 2 3 4 5 6 7
2.	Si l'organisme pouvait engager quelqu'un pour me remplacer à un échelon inférieur, il le ferait.....					1 2 3 4 5 6 7
3.	L'organisme n'apprécie aucun effort supplémentaire de ma part.....					1 2 3 4 5 6 7
4.	L'organisme tient beaucoup compte de mes buts et de mes valeurs.....					1 2 3 4 5 6 7
5.	L'organisme ne tiendrait pas compte d'une plainte de ma part.....					1 2 3 4 5 6 7
6.	L'organisme ne considère pas mon intérêt quand il prend des décisions qui me touchent.....					1 2 3 4 5 6 7
7.	L'organisme est prêt à me fournir de l'aide quand j'ai un problème.....					1 2 3 4 5 6 7
8.	L'organisme s'intéresse beaucoup à mon bien-être....					1 2 3 4 5 6 7

OC

Ci-dessous, vous trouverez quelques déclarations sur l'organisme pour lequel vous travaillez. Vous pouvez être d'accord ou ne pas être d'accord avec chacune selon votre évaluation personnelle. Veuillez indiquer à quel point vous êtes d'accord ou en désaccord avec chaque déclaration en encerclant un chiffre de 1 à 7 selon l'échelle suivante.

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>				
<i>complètement en désaccord</i>	<i>en désaccord</i>	<i>plus ou moins en désaccord</i>	<i>ni d'accord ni en désaccord</i>	<i>plus ou moins d'accord</i>	<i>d'accord</i>	<i>complètement d'accord</i>				
1.	J'ai le sentiment de vraiment appartenir à mon organisme.....			1	2	3	4	5	6	7
2.	Je n'ai aucun lien émotif avec mon organisme.....			1	2	3	4	5	6	7
3.	Cet organisme a une signification personnelle importante pour moi.....			1	2	3	4	5	6	7
4.	Je ne me sens pas comme "un membre de la famille" de cet organisme.....			1	2	3	4	5	6	7
5.	Je serais heureux(se) de passer le reste de ma carrière avec cet organisme.....			1	2	3	4	5	6	7
6.	J'aime beaucoup parler de cet organisme avec des personnes extérieures.....			1	2	3	4	5	6	7
7.	Je considère que les problèmes de cet organisme sont les miens.....			1	2	3	4	5	6	7
8.	Je pense que je pourrais facilement m'attacher autant à un autre organisme.....			1	2	3	4	5	6	7
9.	En ce moment, rester avec cet organisme c'est autant une question de nécessité que de désir.....			1	2	3	4	5	6	7
10.	Une des raisons pour lesquelles je continue à travailler pour cet organisme c'est que le quitter nécessiterait des sacrifices personnels importants – un autre organisme ne m'accorderait pas les mêmes avantages globaux.....			1	2	3	4	5	6	7
11.	Je pense que j'ai trop peu d'options pour penser à quitter cet organisme.....			1	2	3	4	5	6	7
12.	Une des rares conséquences négatives de quitter cet organisme serait le petit nombre d'autres "solutions"...			1	2	3	4	5	6	7

Ci-dessous, vous trouverez quelques déclarations sur l'organisme pour lequel vous travaillez. Vous pouvez être d'accord ou ne pas être d'accord avec chacune selon votre évaluation personnelle. Veuillez indiquer à quel point vous êtes d'accord ou en désaccord avec chaque déclaration en encerclant un chiffre de 1 à 7 selon l'échelle suivante.

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
<i>complètement en désaccord</i>	<i>en désaccord</i>	<i>plus ou moins en désaccord</i>	<i>ni d'accord ni en désaccord</i>	<i>plus ou moins d'accord</i>	<i>d'accord</i>	<i>complètement d'accord</i>
13.	Ce serait difficile pour moi de quitter mon organisme en ce moment, même si je le voulais.....					1 2 3 4 5 6 7
14.	Cela dérangerait trop ma vie si je décidais de quitter mon organisme en ce moment.....					1 2 3 4 5 6 7
15.	Ce ne serait pas trop coûteux si je quittais mon organisme plus tard.....					1 2 3 4 5 6 7
16.	Je n'ai pas peur de ce qui arriverait si je quittais mon poste sans en avoir trouvé un autre.....					1 2 3 4 5 6 7

PC/PS

Veuillez indiquer à quel point vous êtes d'accord ou vous n'êtes pas d'accord avec les déclarations suivantes en encerclant le chiffre pertinent de l'échelle.

1= complètement en désaccord 2= en désaccord 3= d'accord 4= complètement d'accord

1.	J'ai assez de pouvoir dans cet organisme pour contrôler les événements qui pourraient toucher mon poste.....	1	2	3	4
2.	Dans cet organisme je peux empêcher les choses négatives d'influer sur ma situation de travail.....	1	2	3	4
3.	Je comprends assez bien cet organisme pour pouvoir contrôler les choses qui me touchent.....	1	2	3	4

La prochaine série de questions porte sur les récentes initiatives en matière de réduction des effectifs/restructuration qui touchent tous les fonctionnaires fédéraux. Veuillez lire chacune des questions suivantes et indiquer votre réponse en encerclant le chiffre pertinent de l'échelle. Veuillez bien lire chaque échelle -- les descripteurs et les explicitations varient selon les questions.

1. Quelle est la probabilité que vous perdrez votre emploi à cause de la réduction des effectifs au cours des trois années à venir?

1	2	3	4	5	6	7	8	9	10
PAS DU TOUT PROBABLE									TRÈS PROBABLE/ PRESQUE CERTAIN

2. Supposons que vous soyez mis(e) à pied à cause de cette réduction des effectifs, dans quelle mesure, d'après vous, l'assistance offerte par la direction à ceux qui seraient mis à pied subviendrait-elle à vos besoins?

1	2	3	4	5	6	7	8	9	10
PAS DU TOUT									TRÈS BIEN

3. Quelle est la probabilité que vous occuperez le même poste l'an prochain?

1	2	3	4	5	6	7	8	9	10
TRÈS PEU PROBABLE/ AUCUNE CHANCE DE RESTER									TRÈS PROBABLE/ JE RESTERAI SÛREMENT

4. Quelle est la probabilité que vous ferez la même sorte de travail l'an prochain?

1	2	3	4	5	6	7	8	9	10
TRÈS PEU PROBABLE/ AUCUNE CHANCE									TRÈS PROBABLE/ SÛREMENT

Ci-dessous, vous trouverez quelques déclarations que les gens ont faites pour décrire leurs réactions devant la réduction des effectifs/restructuration des organismes.

Veuillez lire chacune des cinq déclarations suivantes et indiquer, en encerclant le chiffre de l'échelle, à quel point vous croyez ou ne croyez pas que la déclaration *décrit votre propre comportement*.

	<i>1 complètement d'accord</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 complètement en désaccord</i>
1. Peu importe où la restructuration/réduction des effectifs m'emmènera, je pourrai certainement me tirer d'affaire.	1	2	3	4	5
2. J'ai un peu peur de ne pas pouvoir faire tout ce qui sera exigé de moi dans le cadre de la restructuration/réduction des effectifs.	1	2	3	4	5
3. J'ai des raisons de croire que je ne remplirai pas bien mes fonctions à la suite de la restructuration/réduction des effectifs.	1	2	3	4	5
4. Même si j'ai besoin peut-être d'un peu de recyclage, je ne doute pas de pouvoir bien remplir mes fonctions à la suite de la restructuration/réduction des effectifs.	1	2	3	4	5
5. J'essaie de voir la restructuration/réduction des effectifs comme une véritable occasion.	1	2	3	4	5

Veuillez lire chacune des huit déclarations suivantes et indiquez en encerclant un des cinq chiffres jusqu'où la déclaration *caractérise ou ne caractérise pas votre comportement*.

	<i>1 caractérise beaucoup</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 ne caractérise pas du tout</i>
1. Je me concentre sur mon emploi actuel et j'essaie de penser le moins possible à la restructuration/réduction des effectifs.	1	2	3	4	5
2. Je lis tout ce que je peux trouver pour essayer de comprendre la restructuration/réduction des effectifs.	1	2	3	4	5
3. Je partage des inquiétudes et des anxiétés avec d'autres dans la même situation.	1	2	3	4	5
4. Je recherche des renseignements de différentes sources sur la restructuration/réduction des effectifs et ses implications.	1	2	3	4	5
5. Je partage mes inquiétudes avec des travailleurs qui sont proches.	1	2	3	4	5
6. Je ne pense même pas à la restructuration/réduction des effectifs.	1	2	3	4	5
7. Je partage mes inquiétudes avec mes amis extérieurs au milieu du travail et/ou avec mon/ma conjoint(e).	1	2	3	4	5
8. Je me débrouille en oubliant la restructuration/réduction des effectifs jusqu'à ce qu'elle me touche.	1	2	3	4	5

Pour les questions suivantes, veuillez encrer le chiffre de l'échelle qui décrit le mieux votre situation actuelle ou votre perspective personnelle.

1. Comment évaluez-vous vos chances de trouver un emploi en dehors de votre organisme?

1	2	3	4	5
absolument aucune chance				d'excellentes chances

2. À quel point, d'après vous, vos compétences sont-elles transférables/utiles pour un autre organisme?

1	2	3	4	5
pas du tout transférables				très transférables

3. À quel point êtes-vous le soutien principal de votre foyer?

1	2	3	4	5
pas du tout				complètement

4. À quel point vous sentez-vous prêt(e) à chercher un autre emploi? (Par exemple vous avez/vous pouvez produire un curriculum vitae à jour, vous connaissez les techniques de recherche d'emploi, vous êtes préparé(e) à des questions d'entrevue).

1	2	3	4	5
pas du tout				très prêt(e)

Veillez répondre aux questions suivantes relatives à votre organisme selon l'échelle de 5 présentée ci-dessous. Pour chaque question, veuillez encercler le chiffre qui décrit le mieux votre réponse.

	1	2	3	4	5
	extrêmement incertain(e)				extrêmement certain(e)
1.	À quel point êtes-vous certain(e) des possibilités de promotion et d'avancement qui existeront au cours des prochaines années dans cet organisme?				
				1 2 3 4 5	
2.	À quel point êtes-vous certain(e) de la direction que prendra votre carrière au sein de cet organisme?				
				1 2 3 4 5	
3.	À quel point êtes-vous certain(e) de votre sécurité d'emploi?				
				1 2 3 4 5	

Quelles sont les chances que vous soyez renvoyé(e) ou mis(e) à pied au cours de l'année à venir. Veuillez indiquer les chances ci-dessous.

1	2	3	4	5
0%	25%	50%	75%	100%
de chances	de chances	de chances	de chances	de chances

SECTION V :

CHIPS

Cochez le chiffre qui indique À QUEL POINT CHAQUE PROBLÈME VOUS A INQUIÉTÉ(E) OU BOULEVERSÉ(E) PENDANT LE DERNIER MOIS, Y COMPRIS AUJOURD'HUI. Encerclez seulement un chiffre pour chaque question. Le 0 veut dire que cela ne vous a pas inquiété(e) du tout et le 4 veut dire que le problème vous a sérieusement inquiété(e).

0	1	2	3	4
pas inquiété(e) du tout				sérieusement inquiété(e)

À QUEL POINT ÊTES-VOUS/ AVEZ-VOUS ÉTÉ INQUIÉTÉ(E) PAR

1.	des problèmes de sommeil (je ne peux pas dormir, je me réveille en pleine nuit ou au petit matin)	0	1	2	3	4
2.	un changement de poids (perte ou gain de 5 livres ou plus)	0	1	2	3	4
3.	un mal de dos	0	1	2	3	4
4.	la constipation	0	1	2	3	4
5.	le vertige	0	1	2	3	4
6.	la diarrhée	0	1	2	3	4
7.	des faiblesses	0	1	2	3	4
8.	une fatigue constante	0	1	2	3	4
9.	des maux de tête	0	1	2	3	4
10.	des migraines	0	1	2	3	4
11.	des nausées et/ou des vomissements.....	0	1	2	3	4
12.	des brûlures d'estomac ou de l'indigestion.....	0	1	2	3	4
13.	des maux d'estomac (par exemple: crampes)	0	1	2	3	4
14.	la sensation d'avoir trop chaud ou trop froid	0	1	2	3	4
15.	un tremblement des mains.....	0	1	2	3	4
16.	le coeur qui bat trop fort ou trop rapidement.....	0	1	2	3	4
17.	un manque d'appétit.....	0	1	2	3	4
18.	un essoufflement même sans faire de l'exercice ou travailler fort..	0	1	2	3	4

Cochez le chiffre qui indique À QUEL POINT CHAQUE PROBLÈME VOUS A INQUIÉTÉ(E) OU BOULEVERSÉ(E) PENDANT LE DERNIER MOIS, Y COMPRIS AUJOURD'HUI. Encerclez seulement un chiffre pour chaque question. Le 0 veut dire que cela ne vous a pas inquiété(e) du tout et le 4 veut dire que le problème vous a sérieusement inquiété(e).

	0	1	2	3	4
	pas inquiété(e) du tout				sérieusement inquiété(e)
19. un engourdissement ou des tremblements dans certaines parties de mon corps.....	0	1	2	3	4
20. une sensation de faiblesse dans tout le corps.....	0	1	2	3	4
21. des douleurs au coeur ou à la poitrine.....	0	1	2	3	4
22. le sentiment de manquer d'énergie.....	0	1	2	3	4
23. la tête ou le nez bouchés	0	1	2	3	4
24. la vision troublée.....	0	1	2	3	4
25. des tensions ou des douleurs musculaires.....	0	1	2	3	4
26. des crampes musculaires.....	0	1	2	3	4
27. des douleurs et des maux aigus.....	0	1	2	3	4
28. l'acné.....	0	1	2	3	4
29. des contusions.....	0	1	2	3	4
30. des saignements de nez.....	0	1	2	3	4
31. des muscles déchirés (claqué).....	0	1	2	3	4
32. des ligaments déchirés (étirés).....	0	1	2	3	4
33. un rhume ou une toux.....	0	1	2	3	4

HBC

Veuillez indiquer à quel point les déclarations suivantes décrivent votre *comportement typique*. Les réponses peuvent varier de 0 (je ne le fais jamais, peu typique) à 4 (extrêmement typique, je le fais toujours).

	0 jamais/ peu typique	1 rarement	2 parfois	3 souvent	4 presque toujours/ extrêmement typique
1. J'ai un régime alimentaire équilibré.....	0	1	2	3	4
2. Je dors assez	0	1	2	3	4
3. J'ai des numéros d'urgence près du téléphone.....	0	1	2	3	4
4. Je choisis des loisirs qui m'aident à me détendre.....	0	1	2	3	4
5. Je prends des risques quand je traverse la rue.....	0	1	2	3	4
6. J'ai une trousse de premiers soins à la maison.....	0	1	2	3	4
7. Je détruis les médicaments périmés ou non utilisés.....	0	1	2	3	4
8. Je vais voir un médecin pour des examens réguliers.....	0	1	2	3	4
9. Je prie et je vis selon des principes religieux.....	0	1	2	3	4
10. J'évite d'avoir froid.....	0	1	2	3	4
11. Je surveille mon poids.....	0	1	2	3	4
12. J'obéis soigneusement aux règlements de la circulation afin d'éviter les accidents.....	0	1	2	3	4
13. Je guette les signes de grands problèmes de santé (ex. le cancer, l'hypertension, les maladies cardiaques).....	0	1	2	3	4
14. Je fais de l'exercice pour rester en santé.....	0	1	2	3	4
15. Je traverse la rue au feu rouge.....	0	1	2	3	4
16. J'évite les quartiers de haute criminalité.....	0	1	2	3	4
17. Je ne fume pas.....	0	1	2	3	4
18. Je ne prends pas de substances chimiques qui pourraient nuire à ma santé (ex. des additifs alimentaires, des drogues, des stimulants).....	0	1	2	3	4
19. Je vérifie l'état des appareils électriques, de l'auto, etc., pour prévenir les accidents.....	0	1	2	3	4
20. J'évite les endroits où je pourrais être exposé(e) à des microbes.....	0	1	2	3	4
21. Je répare tout de suite les choses cassées à la maison.....	0	1	2	3	4
22. Je vais régulièrement me faire examiner chez le dentiste.....	0	1	2	3	4

Veuillez indiquer à quel point les déclarations suivantes décrivent votre *comportement typique*. Les réponses peuvent varier de 0 (je ne le fais jamais, peu typique) à 4 (extrêmement typique, je le fais toujours).

0	1	2	3	4		
jamais/ peu typique	rarement	parfois	souvent	presque toujours/ extrêmement typique		
23.	Je limite ma consommation de denrées telles que le café, le sucre, les matières grasses, etc.....	0	1	2	3	4
24.	J'évite les médicaments vendus sans ordonnance.....	0	1	2	3	4
25.	Je prends des vitamines.....	0	1	2	3	4
26.	Je ne bois pas d'alcool.....	0	1	2	3	4
27.	J'attache ma ceinture quand je roule en auto.....	0	1	2	3	4
28.	Je traverse les rues passantes loin des intersections.....	0	1	2	3	4
29.	J'évite les zones de pollution élevée.....	0	1	2	3	4
30.	Je parle de questions de santé avec mes amis, mes voisins et/ou ma parenté.....	0	1	2	3	4
31.	Je me renseigne sur les choses qui affectent ma santé en regardant la télévision et en lisant des livres, des journaux ou des articles de revue.....	0	1	2	3	4
32.	Je me sers régulièrement de soie dentaire.....	0	1	2	3	4
33.	Je fais de la vitesse au volant.....	0	1	2	3	4
34.	Je me brosse les dents régulièrement.....	0	1	2	3	4
35.	Je prends des suppléments de santé (ex. des suppléments de protéines, du germe de blé, du son, de la lécithine, etc).....	0	1	2	3	4
36.	J'apprends les techniques de premiers soins.....	0	1	2	3	4
37.	Je me fais faire des piqûres pour prévenir les maladies.....	0	1	2	3	4
38.	Je prends plus de risques en faisant des choses que la personne moyenne.....	0	1	2	3	4
39.	Je conduis après avoir bu.....	0	1	2	3	4
40.	Je participe à des activités ou à des passe-temps où les accidents sont probables.....	0	1	2	3	4

Veuillez indiquer tout autre comportement relatif à la santé qui pourrait être pertinent et indiquez à quel point il s'agit d'un comportement typique.

Autres comportements relatifs à la santé	à quel point typique (indiquer numéro de l'échelle)
1. _____	_____
2. _____	_____
3. _____	_____

SECTION VI :

RENSEIGNEMENTS GÉNÉRAUX

Nous aimerions avoir des renseignements généraux sur vous. Tous ces renseignements demeureront confidentiels et ne serviront qu'à compiler des données globales sur les participant(e)s. À aucun moment n'identifierons-nous les individus. Les données ne seront pas organisées ni résumées de façon à permettre de déterminer l'identité des individus.

1. Sexe : ☐ Masculin ☐ Féminin (cocher)
2. Âge : _____ (ans)
3. État civil: (encrer)
 1. CÉLIBATAIRE (JAMAIS MARIÉ(E))
 2. MARIÉ(E)
 3. SÉPARÉ(E)/DIVORCÉ(E)
 4. VEUF/VEUVE
 5. AUTRE (PRÉCISER) _____
4. Si vous avez des enfants, combien d'entre eux vivent chez vous et dépendent de votre appui financier, ou combien d'enfants soutenez-vous financièrement? _____ NOMBRE D'ENFANTS
5. Vous occupez-vous d'autres personnes (ex. des personnes âgées vivant chez vous)?
 _____ OUI _____ NON
6. Quelle est la classification de votre poste actuel? (Groupe et niveau) _____
7. Depuis combien de temps occupez-vous ce poste? _____ (ans)
8. Depuis combien de temps êtes-vous à l'emploi de la Fonction publique? _____ (ans)
9. En moyenne, combien d'heures par semaine travaillez-vous au bureau? _____ (heures)
10. En moyenne, combien d'heures par semaine consacrez-vous à faire du travail relié à votre poste chez vous?
 _____ (heures)
11. Quel est votre dernier niveau d'études? (préciser) _____
12. Avez-vous été désigné(e) comme personne "touchée" ou "excédentaire" par le programme de réduction des effectifs du gouvernement? _____ OUI _____ NON
13. Prévoyez-vous de vous prévaloir du PERA/de la PDA? (UNE RÉPONSE - COCHER)
 _____ OUI _____ NON _____ INDÉCIS(E)
14. Si oui, duquel? du PERA (Programme d'encouragement à la retraite anticipée) _____
 de la PDA (Prime de départ anticipé) _____ (COCHER)
15. Quelle est votre langue première? (UNE RÉPONSE - COCHER)
 _____ français
 _____ anglais
 _____ autre (veuillez préciser) _____
16. Quelle est votre situation d'emploi? (cochez une case s.v.p.)
 _____ période indéterminée
 _____ période déterminée
 _____ autre (veuillez préciser) _____
17. Dans quel ministère travaillez-vous actuellement? _____
18. Dans quelle région travaillez-vous actuellement? _____

QUESTIONS OUVERTES

Dans cette étude nous avons essayé de comprendre les joies, les problèmes, les ennuis et les avantages propres au milieu de travail ainsi que la relation entre ce dernier et les autres activités quotidiennes. Nous avons essayé également de comprendre les différentes stratégies d'adaptation et les réponses face à la récente restructuration/réduction des effectifs et les facteurs stressants reliés au travail. Y a-t-il d'autres choses que vous aimeriez nous dire et qui nous aideraient à comprendre ces questions?

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Avez-vous des questions ou des commentaires relatifs aux questionnaires que vous venez de remplir? Ou relatifs à ce genre de recherche?

Merci à nouveau de votre participation et votre collaboration. Si vous avez des questions sur cette recherche, veuillez nous contacter au département de psychologie de l'Université Carleton.

Mary Anne Robblee

STRATÉGIES D'ADAPTATION COGNITIVE,
INSÉCURITÉ D'EMPLOI, PROJETS PERSONNELS ET SANTÉ

LETTRE DE FIN D'ENQUÊTE

Cher participant, chère participante,

Merci de votre participation à ce projet mené par Mary Anne Robblee du département de psychologie de l'Université Carleton sous la supervision de Mary Gick, Ph.D. et de W. Jones, Ph.D. À présent, un nombre croissant de recherches suggèrent que les relations entre une personne et son environnement jouent un rôle important et influent dans l'évaluation du stress, les efforts comportementaux d'adaptation, les pratiques en matière de santé et les états de santé psychologique et physique. Cette étude représente le test d'un modèle de santé pour les relations et interactions entre les stratégies d'adaptation cognitive (le "*monitoring*": l'état de vigilance, le "*blunting*": la recherche de distractions cognitives), les caractéristiques reliées ou non reliées au travail (ex. importance personnelle, plaisir, défi) et un certain nombre de facteurs organisationnels (ex. perception de contrôle, insécurité d'emploi).

Votre participation nous fournira des renseignements essentiels à la compréhension de ce réseau complexe de relations. De plus, à partir de ces renseignements, il sera possible de formuler des suggestions en vue d'interventions et de stratégies mieux informées à l'intérieur et à l'extérieur de différents organismes. Votre participation a été des plus importantes et nous vous en sommes reconnaissants.

Toutes vos réponses demeureront confidentielles. Votre nom ne paraîtra jamais sur les questionnaires et ne sera pas publié avec les résultats de ce projet. Personne de votre milieu de travail ni de votre organisme n'aura accès à vos réponses. Dans l'analyse finale, toutes les données seront compilées. Une fois toutes les données analysées, vous recevrez un sommaire des principaux résultats, ces derniers paraissant sous forme de statistiques, sans aucune référence formelle.

Si vous avez des questions concernant cette étude, n'hésitez pas à communiquer avec Mary Anne Robblee au 729-9176, ou Mary Gick Ph.D. au 520-2600 (poste 2664). Vous pouvez de plus téléphoner au directeur du département de psychologie, W. Jones, Ph.D. (poste 2648), ainsi qu'au chef du comité d'éthique, L. Paquet, Ph.D. (poste 2692), pour toute question d'éthique.

Je tiens à vous remercier encore une fois de votre participation et j'aimerais vous demander de conserver cette page pour vos dossiers.

Mes salutations les meilleures,

Mary Anne Robblee
Département de psychologie
Université Carleton
Ottawa (Ontario)

Lectures suggérées

Ceux qui aimeraient apprendre davantage sur les recherches mentionnées ci-haut trouveront ici une courte liste de références, en anglais, pour leur usage personnel.

Ashford, Susan J. (1988). Individual strategies for coping with stress during organizational transitions. Journal of Applied Behavioural Science, 24, 1, 19-36.

Kelloway, E. Kevin., & Barling, Julian. (1991). Job characteristics, role stress and mental health, Journal of Occupational Psychology, 64, 291-304.

Miller, Suzanne M. (1990). To see or not to see: Cognitive informational styles in the coping process. In Michael Rosenbaum (Ed.). Learned Resourcefulness: On Coping Skills, Self-Control and Adaptive Behavior. Springer Publishing Company: New York.

Si vous vous intéressez à une documentation vous permettant de mieux résoudre les problèmes reliés au stress, les ouvrages suivants, également en anglais, pourront vous être utiles.

Davis, Martha., Eshelman, Elizabeth R., & McKay, Mathew. (1995). The Relaxation & Stress Reduction Workbook (4th edition). New Harbinger Publications, Inc.: Oakland, CA.

Matteson, Michael T., & Ivancevich, John M. (1987). Controlling Work Stress: Effective Human Resource and Management strategies. Jossey-Bass Inc.: San Francisco, CA.

Lazarus, Richard S., & Lazarus, Bernice N. (1994). Passion & Reason: Making Sense of Our Emotions. Oxford University Press: New York.

APPENDIX K:

Reliability Estimates (α) for Study Measures

Appendix K:

Reliability Estimates for Study Variables

Scale/ Measure	Overall Alpha	English Alpha	French Alpha
Job Stress Measures:			
Role Overload	.8927 (n=216)	.8964 (n=154)	.8829 (n=62)
Role Conflict	.8232 (n=220)	.8307 (n=157)	.8109 (n=63)
Role Ambiguity	.7734 (n=222)	.7660 (n=158)	.7956 (n=64)
RRCAOS	.8746 (n=215)	.8861 (n=154)	.8444 (n=61)
Job Insecurity Measures:			
Brockner items	.6941 (n=223)	.6945 (n=159)	.6908 (n=64)
Davy items	.7344 (n=223)	.7558 (n=159)	.6693 (n=64)
JOBINSEC	.7618 (n=222)	.7744 (n=159)	.7375 (n=63)
Perceived Stress Scale:	.8750 (n=221)	.8779 (n=158)	.8733 (n=63)
Organizational Coping Resources:			
Perceived Org. Support POSTOT	.8859 (n=223)	.8835 (n=159)	.8938 (n=64)
Perceived Org. Control PCORGTOT	.7509 (n=220)	.7627 (n=157)	.7306 (n=63)
Personal Coping Resources:			
<u>Coping Style</u>			
Monitoring	.6138 (n=224)	.6165 (n=160)	.5725 (n=64)
Blunting ^a	.6093 (n=224)	.6320 (n=160)	.5303 (n=64)
<u>Health Behaviour</u>			
HBWELLTO (wellness)	.7860 (n=217)	.7807 (n=155)	.8009 (n=62)
HBACCTOT (accident)	.7148 (n=221)	.7047 (n=157)	.7355 (n=64)
HBPREEN (preventive)	.8277 (n=217)	.8265 (n=155)	.8316 (n=62)
HBRISK1 (risk taking)	.7049 (n=218)	.7174 (n=154)	.6689 (n=64)
HBRISK2R (substance use) ^b	.6651 (n=223)	.6346 (n=159)	.7149 (n=64)
<u>Change Specific Efficacy-</u> EFFICATO	.6391 (n=221)	.6025 (n=158)	.7193 (n=63)
<u>Negative Affect</u> TRAITTOT	.9296 (n=218)	.9283 (n=154)	.9338 (n=64)

Scale/ Measure	Overall Alpha	English Alpha	French Alpha
Coping Responses:			
COGAVOID	.6418 (n=223)	.6423 (n=159)	.6351 (n=64)
INFOSEEK	.8309 (n=223)	.8375 (n=159)	.8152 (n=64)
EMOTDISC	.8018 (n=223)	.7698 (n=159)	.8759 (n=64)
Organizational Criteria:			
<u>Job Satisfaction</u>			
JOBSATOT	.8931 (n=222)	.8969 (n=158)	.8877 (n=64)
<u>Organizational Commitment</u>			
Affective ACOMIT	.8412 (n=222)	.8470 (n=158)	.8298 (n=64)
Continuance CCOMIT	.7846 (n=217)	.7768 (n=158)	.8033 (n=59)
<u>Organizational Affect</u>			
ACOMJSAR	.9008 (n=222)	.9044 (n=158)	.8938 (n=64)
Personal Health-Related			
Criteria:			
<u>Emotional Health</u>			
STATETOT	.9477 (n=217)	.9428 (n=154)	.9554 (n=63)
<u>Physical Health</u>			
CHIPS	.9311 (n=215)	.9281 (n=154)	.9400 (n=61)

Note: RRCAOS, composite total of subscales role overload, role conflict, and role ambiguity (Abdel-Halim, 1978, adapted from Beehr et al., 1976 and Rizzo et al., 1970); JOBINSEC, Job insecurity measure- composite total of Brockner et al., 1992 and Davy et al., 1991 items, plus AFFECTED status (1=yes, 0=no); Perceived Stress Scale (Cohen et al., 1983); POSTOT, Perceived Organizational Support (POS) (Eisenberger et al., 1986, 1990); PCORTOT, (Perceived Organizational Control, (PC) (Ashford et al., 1989); Monitoring & Blunting Coping Styles (MBSS) (Miller, 1979, 1987, 1988); HBWELLTO & HBACCTOT subscales of Health Behaviours Checklist, Preventive Health Behaviours (HBC) (Vickers et al., 1990) dealing with wellness and accident prevention; HBPREEN, composite of HBWELLTO & HBACCTOT for measure of Preventive Health Behaviours (Vickers et al., 1990); HBRISK, Health Behaviour Risk Taking/Substance Use, subscale of Vickers et al., 1990 (HBC); COGAVOID (Cognitive avoidance), INFOSEEK (information seeking) and EMOTDISC (emotional discharge) are subscales of the Ashford 1988 coping response measure which taps items specific to downsizing and restructuring; JOBSATOT refers to the total score for the JDI job satisfaction measure (Smith et al., 1969); ACOMIT (Organizational Affective Commitment) and CCOMIT (Continuance Commitment) (Meyer & Allen, 1984); ACOMJSAR is the composite total score of JOBSATOT & ACOMIT (Organizational Affective Well-Being); STATETOT (State Anxiety, STAI-S-Anxiety, measure of Psychological Health) and TRAITOT (Trait Anxiety, STAI-T Anxiety, measure of Negative Affectivity) (Spielberger, 1983); CHIPS (Cohen & Hoberman Inventory of Physical Symptoms, 1983).

* Blunting subscale of MBSS with item 12 deleted "I would take a tranquilizer or have a drink before going" from the dentist scenario.

* Health Behaviours Checklist subscale 'Substance Use: Risk' with item 29 removed "I avoid areas of high pollution".

APPENDIX L:

Factor Analysis: Rotated Factor Matrix

Appendix L:
Rotated Factor Matrix: Varimax Rotation

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
TRAITTOT	.84463	-.13678	-.11854	-.10162	.00998	.13191	.05140	.03299
PSSTOT	.84326	-.05292	-.05543	-.08203	.04987	.12028	.08620	.18453
STATETOT	.82718	-.14302	-.17748	-.01118	.06342	.07435	.06964	.08191
CHIPSTOT	.62795	-.14743	-.05937	-.05598	.10778	.07240	.02143	.39499
ACOMITOT	-.02058	.83368	-.07985	.06576	-.00796	.02847	.00722	.11401
POSTOT	-.13588	.75795	-.02172	.00284	-.15823	-.19767	.01766	-.21706
JOBSTATOT	.29458	.70039	-.06605	-.02004	-.21165	.13166	-.03991	-.05799
PCORGTOT	-.05267	.55912	.11571	.06318	-.30364	-.20115	.01660	-.13472
HBPREEN	-.14398	-.04162	.92959	.06049	-.04697	-.06187	-.05497	-.03224
HBACCTOT	-.11652	.03232	.82191	-.04340	-.02953	-.14836	.04705	.06197
HBWELLTO	-.13224	-.08567	.80375	.12195	-.04924	.01384	-.11629	-.09292
TENURE	-.05782	.05067	.04845	.80067	-.11557	-.03042	-.09697	.00821
AGE	-.11389	-.01158	.11286	.73910	.10999	.05826	-.08331	.04420
ESTATUS	.11331	-.02798	.02446	-.65230	.41787	.01158	.09671	-.03425
JOBCTR	-.01455	.18133	-.13714	.57278	-.16590	.01984	.00815	.06735
PLANNING	.09813	-.21819	-.06266	.36602	-.19917	-.10984	-.04573	.03790
AFFECTED	.02876	-.04421	-.00815	.00290	.78217	-.05501	-.08916	-.20473
JOBSCTO	.13919	-.26616	-.12377	-.17294	.72256	-.01397	-.01423	.07940
JINSECTO	.06158	-.30695	-.01911	-.18141	.63367	.10387	.01510	.23871
REDEF05	.04605	-.09201	-.11388	.02422	.10580	.76313	.08177	.02772
EFFICATO	.19677	.02172	-.05413	-.02480	-.06129	.68798	.10775	.02669
CCOMITOT	.25270	-.07642	.03751	-.04509	-.16031	.61426	-.06616	-.02546
ECONOMIC	-.07829	.02437	.16787	-.15214	-.02413	-.54603	-.08678	.03449
MBSCORE	.12569	-.05299	-.04824	-.12188	-.08488	.09093	.91165	-.03104
BLUNTING	-.05662	-.06782	.03901	.08643	-.04121	-.06851	-.82379	.08150
MONITOR	.12865	-.13701	-.03377	-.09628	-.15859	.06819	.56008	.02919
OLOADTOT	.21891	-.00183	-.03227	.10525	-.10726	.09991	-.07158	.81216
CONFLTOT	.16256	-.13113	.00866	.02738	.05659	-.08830	-.06435	.78394
AMBIGTOT	.23332	-.49687	-.07467	.00643	-.11657	.04647	.08396	.50013
INFOSEEK	-.00894	-.07433	-.31532	-.04133	.01628	.10531	-.02997	.04592
COGAVOID	-.11339	-.02108	.05871	-.08615	.12086	-.00819	.19180	.02143
EMOTDISC	-.15278	-.07316	-.14512	.09761	-.01635	-.12356	.00211	-.12350
WORKWEEK	.07113	.02198	-.20665	.14536	-.01947	.01673	-.07159	.12095
METHOD	.03901	.15587	.07350	-.01491	-.19495	.11207	.03276	-.05396
TIMEPOSI	-.04853	.06186	.15746	.47411	.11331	.10947	-.00043	.11288
QUELANG	.05414	-.07291	-.00289	-.01711	-.10382	-.04739	.00955	-.04622
LANG	.12120	.15066	.06710	-.12129	-.01082	-.00295	-.09537	-.12214
HBRISK2R	.13883	.05826	-.17525	.11414	.03118	.03436	.05242	-.11339
EDUC	-.05997	-.18095	-.01669	.12298	.05124	.04214	.18569	.08872
SUPCHILD	-.05197	.03028	-.05303	.13889	-.12603	-.09548	.12001	.00240
GENDER	-.03089	.13795	.21374	-.14275	-.02036	-.12369	.23462	.14020
ERIEDI	.09465	-.17817	-.26927	.33417	-.05482	-.32561	-.10398	-.00593
CARESUPP	-.00419	-.06964	.03645	.02054	.04981	.05038	.01327	-.00372
HBRISK1	.01989	-.05697	-.12512	-.04496	-.06600	-.07313	-.19782	.01408
MARITAL	-.14220	-.03861	-.04049	.07152	.01901	.08102	.00649	-.01514
WORKHOME	.23708	.19234	.18674	.14101	.11606	-.11600	.13455	.27401

Appendix L continues

	Factor 9	Factor 10	Factor 11	Factor 12	Factor 13	Factor 14	Factor 15	Factor 16
TRAITTOT	-.03098	-.01752	.00838	.04017	-.01288	-.05247	.01578	-.06270
PSSTOT	-.04452	.02616	.04519	-.07020	-.03654	-.03154	.01584	-.04544
STATETOT	.06819	.08818	.11277	-.04489	.06009	.05896	-.05752	-.05114
CHIPSTOT	.05504	.00714	-.04134	-.16540	.09993	.00703	.01968	.05049
ACOMITOT	.20518	.10540	.00860	-.06920	-.06298	-.08986	-.05832	.05386
POSTOT	-.15136	-.04758	.06252	-.10178	.04326	.01511	-.05971	-.13643
JOBSATOT	.02430	-.07162	.02114	-.03188	.06173	-.09877	-.06802	.05465
PCORGTOT	.01313	.23428	-.03633	-.00729	-.00817	.02157	.21512	-.10913
HBPREEN	.15945	-.03943	.01835	.07958	.10665	.02012	-.03265	-.00953
HBACCTOT	.10548	-.04330	.04369	-.05416	-.12832	.14791	-.11536	-.00745
HBWELLTO	.16338	-.02803	-.00388	.15833	.25225	-.07615	.03395	-.00894
TENURE	-.03305	.02562	-.05765	-.20086	-.12094	.04750	.02173	.02161
AGE	-.11673	-.00195	-.10303	.12058	-.13907	-.01837	-.12671	.05958
ESTATUS	-.08827	-.05750	-.15654	.13012	-.07917	.04801	-.07097	.07103
JOBCATR	.02989	.34144	-.11075	.32056	-.10340	-.28885	.17424	.07213
PLANNING	.23832	-.16470	.03150	.16057	.31230	.09170	-.24527	.11645
AFFECTED	-.03026	.02290	-.03543	-.03489	-.00500	.08822	-.06787	-.06930
JOBSECTO	.13454	-.10373	-.09251	.12146	.10947	.05941	.03470	.06789
JINSECTO	.07718	-.26783	.05530	-.18341	.06818	-.17409	.03847	.08617
REDEF05	-.01792	.15132	.11138	-.00316	-.06634	.07245	-.09609	.02189
EFFICATO	.00612	-.05635	-.00917	.06102	.20209	.16569	.18724	-.03900
CCOMITOT	-.01770	-.12995	-.19779	.04182	-.08108	-.16434	-.23063	.21477
ECONOMIC	.03773	-.00272	.21292	.21536	.11681	.44348	.03988	.01978
MBSCORE	.15924	-.01712	-.16064	.09349	-.02100	-.01845	-.06776	.09735
BLUNTING	.05332	-.02563	-.15422	.09667	-.02505	-.02711	.07727	.13885
MONITOR	.27587	-.04762	-.36897	.22098	-.05265	-.05086	-.02715	.26458
OLOADTOT	-.10440	.06307	-.06733	.08524	.09970	.03968	-.07730	.05067
CONFLTOT	.11734	.00027	-.07656	.11262	-.00998	.02678	.07176	-.01535
AMBIGTOT	.06705	-.15225	.00571	-.01348	-.02812	-.20494	-.02153	-.15755
INFOSEEK	-.75564	.06496	.03009	.00783	.04742	.02399	-.01489	.03382
COGAVOID	.73311	.15255	.20186	.03286	.06769	.16627	.17661	-.01985
EMOTDISC	-.60645	.20803	.20722	-.15535	-.05963	.02666	.22505	-.07595
WORKWEEK	.10275	.68460	-.10731	.14386	.06909	.16567	-.29159	.01557
METHOD	-.30016	.62224	-.07003	.07680	-.03219	.06605	.11522	.07903
TIMEPOSI	-.18382	-.48747	-.04283	.11079	-.03648	.29533	-.02282	.09323
QUELANG	.14910	-.02657	.82678	-.13871	-.00350	-.07168	-.07315	-.06726
LANG	-.18042	-.14660	.71854	.16907	.04662	.09741	-.10205	.17461
HBRISK2R	-.04288	-.08022	.13825	-.68806	.11142	.07231	.08586	.02085
EDUC	.09403	.08652	.15542	.66642	.03837	-.09651	.34066	-.11982
SUPCHILD	-.03425	-.06460	-.02652	.00265	-.77891	-.00588	-.04973	.13658
GENDER	-.03307	-.01972	.00802	-.19084	.60153	-.07886	-.14269	.04679
ERIEDI	.08567	-.25367	.03722	.24824	.35500	.26647	-.04921	.04340
CARESUPP	.06078	.07205	-.02928	-.14635	-.04072	.74283	.07120	-.07706
HBRISK1	.01731	-.07438	-.18052	.09794	-.05099	.10615	.78004	.07777
MARITAL	.00018	.03558	.04212	-.08585	-.08263	-.05627	.03237	.83696
WORKHOME	-.02791	.33121	-.04045	.02683	.01538	-.19675	.18780	.33655

Appendix L continues

Note: TRAITTOT, measure of Negative Affectivity (NA) (STAI-T Anxiety, Trait Anxiety, Spielberger, 1983); PSSTOT, Perceived Stress Scale, Cohen et al., 1983; STATETOT, measure of Psychological Health (STAI-S Anxiety, State Anxiety, Spielberger, 1983); CHIPSTOT, Cohen & Hoberman Inventory of Physical Symptoms (CHIPS), Cohen & Hoberman, 1983); ACOMITOT, Organizational Affective Commitment, Meyer & Allen, 1984; POSTOT, Perceived Organizational Support (POS), Eisenberger et al., 1986, 1990; JOBSATOT, Job Satisfaction (JDI), Smith et al., 1969; PCORGTOT, Perceived Organizational Control (PC), Ashford et al., 1989; HBPREEN, Preventive Health Behaviours, subscale of HBC, Vickers et al., 1990; HBACCTOT & HBWELLTO subscales of HBC- accident control & wellness behaviours, Vickers et al., 1990; TENURE, time in months employed in the federal government; AGE in years; ESTATUS, employment status dummy coded 1=indeterminate (full-time), 0=term, other/contract; JOBCATR, job category, ranging from 1 (clerks) to 7 (senior managers); PLANNING planning to take advantage of ERI/EDI (Early Retirement Incentive (ERI) or Early Departure Incentive (EDI), 1=yes, 0=no; AFFECTED, Have you been identified as an "affected" or "surplus" individual by the government downsizing exercise?, 1=yes, 0=no; JOBSECTO, job insecurity items (Brockner et al., 1992); JINSECTO, job insecurity items (Davy et al., 1991); REDEF05, Cognitive Redefinition, single item (Ashford, 1988); EFFICATO, Change Specific Efficacy, Ashford, 1988; CCOMITOT, Organizational Continuance Commitment (Meyer & Allen, 1984); ECONOMIC, economic variables concerned with whether or not participant is the "breadwinner" and perceived employment opportunities outside the employing organization (Greenhalgh, 1982); MBSCORE, Monitoring-Blunting Coping Style (MBSS), Miller, 1979, 1987, 1988); BLUNTING, Blunting Coping Style, and MONITOR, Monitoring Coping Style (subscales of MBSS), Miller, 1979, 1987, 1988; OLOADTOT, CONFLTOT, and AMBIGTOT, job role overload, conflict and ambiguity respectively, subscales of Job Role Stress Appraisal (Abdel-Halim, 1978, adapted from Beehr et al., 1976 and Rizzo et al., 1970); INFOSEEK, COGAVOID, and EMOTDISC refers to information seeking coping, cognitive avoidance coping and emotional discharge coping specific to downsizing and restructuring respectively (Coping response subscales, Ashford, 1988); WORKWEEK, "On average how long do you spend working at the office?" (hours); METHOD, Method of Data Collection, 1=room testing, 2=desk drop; TIMEPOSI, Length of time in current position (months); QUELANG, language questionnaire completed in, 1=English, 0=French; LANG, first language spoken, 1=English, 0=French or other; HBRISK2R, Health Behaviour (HBC) subscale dealing with substance risk with item 29 removed (Vickers et al., 1990); EDUC, highest educational level attained, 1=less than grade 12, 2=high school, 3=some college/university, 4=completed college/diploma, 5=completed university undergraduate degree, 6=post-graduate work or degree; SUPCHILD, "If you have children, how many do you financially support?" (actual number); GENDER, 0=male, 1=female; ERIEDI, If you are planning to take advantage of ERI or EDI, which one? 1=ERI (Early Retirement Incentive), 2=EDI (Early Departure Incentive), 0=neither; CARESUPP, "Are you responsible for caring for other people (e.g., elderly living with you)?", 1=yes, 0=no; HBRISK1, Health behaviour risk subscale dealing with risk-taking other than substance use (Vickers et al., 1990); MARITAL, marital status dummy coded 1=married or attached, 0=single or unattached; WORKHOME, "On average, how many hours a week do you spend doing work-related work at home?" (hours).

APPENDIX M:

Correlation Tables

Appendix M.01
Correlations Between Demographic and Job Stress Appraisal, Job Insecurity, and Coping Variables

Variable	AGE (yrs)	GENDER	ESTATUS	TENURE (mo)	JOBCTR	EDUC	MARITAL	LANG
AMBIGTOT	-.02	-.00	-.03	-.07	-.02	.15	.00	.10
OLOADTOT	.07	.10	-.10	.07	.13	.09	.04	.09
CONFLTOT	.04	.02	.02	.01	.12	.13	.04	.09
RRCAOS	.04	.05	-.05	.02	.11	.15	.04	.11
JOBINSEC	-.11	.02	-.39***	-.28***	-.30***	.02	-.07	.12
POSTOT	-.02	.13	-.08	.10	.05	-.22**	-.02	-.13
PCORGTOT	-.08	-.04	-.20*	.14	.22**	-.03	-.07	-.06
MONITOR	-.06	.02	.11	-.08	.08	.15	.16	.19*
BLUNTING	.16	-.11	-.11	.15	.10	-.04	-.03	.05
MBSCORE	-.15	.08	.15	-.16	-.01	.13	.14	.10
EFFICATO	-.04	-.04	.03	-.06	-.07	.03	.01	-.04
HBPVERN	.10	.16	-.06	.03	-.08	.06	-.01	-.08
COGAVOID	-.14	.09	.05	-.07	-.04	.15	.00	-.06
INFOSEEK	.01	-.07	.06	-.05	.04	-.09	-.10	.01
EMOTDISC	.06	-.07	-.11	.12	.04	.03	.00	-.03
REDEF05	-.01	-.11	.06	-.04	-.03	.01	-.01	-.04

Note: ***p<.0001, **p<.001, *p<.01; AGE in years; GENDER dummy coded 0=male, 1=female; Employment Status (ESTATUS) dummy coded 1=indeterminate (full-time), 0=term or other/contract; TENURE in months refers to time spent in government; JOBCTR refers to Job Category ranging from 1 (clerks) to 7 (senior managers); Education (EDUC) ranging from 1 (less than Grade 12) to 6 (post-graduate degree); Marital Status (MARITAL) dummy coded 1= married or attached, 0= single or unattached; First Language (LANG) dummy coded 1=English, 0=French or other language; AMBIGTOT, OLOADTOT, and CONFLTOT refer to the Job Role Ambiguity, Overload and Conflict subscales developed by Rizzo et al., 1970. Each subscale is made up of 5 items scored on a 7 point Likert scale. The Job Stress variable (RRCAOS) is a composite of Job Role Ambiguity, Overload and Conflict subscales. Job Insecurity (JOBINSEC) is a composite of items adapted from Caplan et al., 1975; Brockner et al., 1992; and Davy et al., 1991 and the 'affected status' variable. Coping responses specific to organizational downsizing and restructuring adapted from the Ashford (1988) coping response measure include the following subscales: Cognitive Avoidance (COGAVOID), Information Seeking (INFOSEEK), Emotional Discharge (EMOTDISC), and Cognitive Redefinition (REDEF05) with higher REDEF05 score indicating less cognitive redefinition.

Appendix M.02

Correlations Between Job Stress Appraisal, Job Insecurity, and Coping Variables

Variable	AMBIGTOT	OLOADTOT	CONFLTOT	RRCAOS	JOBINSEC
POSTOT	-.44***	-.21**	-.07	-.40***	-.43***
PCORGTOT	-.31***	-.11	-.01	-.22**	-.45***
MONITOR	.20	.03	.15	.12	.06
BLUNTING	.03	.06	-.13	.07	-.00
MBSCORE	.13	-.01	.00	.04	.04
EFFICATO	.06	.12	.03	.09	.09
HBPREEN	-.06	-.05	.01	-.04	-.09
COGAVOID	-.03	-.14	.06	-.05	.13
INFOSEEK	.04	.14	-.03	.07	.02
EMOTDISC	-.12	-.11	-.20*	-.18*	-.12
REDEF05	.07	.13	-.08	.05	.11

Note: ***p<.0001, **p<.001, *p<.01

AMBIGTOT, OLOADTOT, and CONFLTOT refer to the Job Role Ambiguity, Overload and Conflict subscales developed by Rizzo et al., 1970. Each subscale is made up of 5 items scored on a 7 point Likert scale. The Job Stress variable (RRCAOS) is a composite of Job Role Ambiguity, Overload and Conflict subscales. Job Insecurity (JOBINSEC) is a composite of items adapted from Caplan et al., 1975; Brockner et al., 1992; and Davy et al., 1991 and the 'affected status' variable. Coping responses specific to organizational downsizing and restructuring adapted from the Ashford (1988) coping response measure include the following subscales: Cognitive Avoidance (COGAVOID), Information Seeking (INFOSEEK), Emotional Discharge (EMOTDISC), and Cognitive Redefinition (REDEF05). Higher score on REDEF05 indicates lower optimism or less cognitive redefinition.

APPENDIX N:

Comparisons From Previous Research and Sample Statistics (Means & S.D.)

Appendix N.01

**Comparisons from Previous Research and Sample Statistics (Means & S.D.):
Negative Affectivity (NA) and Organizational and Health-Related Outcomes**

Measure	Reference	Published Mean	Published S.D.	Study Mean	Study S.D.
T-Anxiety (Negative Affect)	Speilberger (1983) (n=1,387)	M=34.89 F=34.79	M=9.19 F=9.22	38.96	10.51
S-Anxiety (Psychological Health)	Speilberger (1983) (n=1,387)	M=35.72 F=35.20	M=10.40 F=10.61	39.88	12.26
CHIPS (Physical Health)	Cohen & Hoberman (1983)	NA	NA	27.61	20.31
JDI (Job Satisfaction)	Abdel-Hulim (1969) (n=89); Kelloway & Barling (1991) (n=805); Smith, Kendall, & Hulin (1969) (n=21,000); * Donaldson (1996) (n=225)	43.82 33.89 M=36.57 F=35.74 42.0	6.59 10.72 M=10.54 F=9.88 10.0	37.48	10.25
Affect. Org. Commit.	Meyer & Allen (1984) (n=130)	33.44	9.84	33.11	9.75

Note: N=224 for the present study; M=male, F=female; NA indicates "not available".

Norms for Speilberger (1983) Trait anxiety & State Anxiety are for Working Adults; CHIPS (Cohen-Hoberman Inventory of Physical Symptoms (Cohen & Hoberman, 1983) no published means & S.D. and no other publications on CHIPS (Personal communication with Sheldon Cohen, Feb. 1997); JDI (Job Design Inventory) Smith, Kendall, & Hulin, (1969) normative sample comprised of pooled samples across 21 US plants, 19 companies, and 16 different communities; Abdel-Hulim (1969) sample of 89 US managers in manufacturing plant; Kelloway & Barling (1991) on sample of 805 Canadian hospital employees; Meyer and Allen (1984) sample of Canadian university employees, means and SD of total scores published as averages across items, therefore above noted means represent total scores multiplied by 8 (the number of items in the scale).

*This study used a composite of the Job Satisfaction and Affective Organizational Commitment scales as the measure of Organizational Affective Well-Being (ACOMJSAR) - for means and S.D see Tables 7-9.

*university based sample experiencing organizational restructuring and downsizing (Donaldson, 1996).

Appendix N.02

Comparisons from Previous Research and Sample Statistics (Means & S.D.): Job Role Stress Appraisal and Job Insecurity Variables

Measure	Reference	Published Mean	Published S.D.	Study Mean	Study S.D.
Role Ambiguity	Abdel-Halim (1978) (n=89)	14.35	3.71		
	Kelloway & Barling (1991) (n=805)	11.45	5.5	17.60	6.18
Role Conflict	Abdel-Halim (1978) (n=89)	21.98	5.28		
	Kelloway & Barling (1991) (n=805)	17.8	6.2	18.51	7.71
Role Overload	Abdel-Halim (1978) (n=89)	17.65	5.19	19.43	8.52
Job Insecurity: Davy items-	Davy, Kinicki, & Scheck (1991) from Caplan et al., (1975) (n=120);	10.41	4.01		
	Ashford, Lee, & Bobko (1989) (n=183);	9.0	2.6		
	*Donaldson (1996) (n=225)	9.2	3.4	13.13	3.51
Brockner items -	Brockner, Grover, Reed, & Dewitt (1992) (n=597)	NA	NA	20.08	7.19

Note: N=224 for the present study; NA indicates "not available".

A composite measure of Job Role Stress (RRCAOS) was used and comprises the Role Ambiguity, Overload and Conflict subscales of Rizzo et al., (1970); The Davy et al., (1991) uses 4 items on a 5-point Likert scale; and the Brockner 4 items are on a 10-point scale; A composite measure of Job Insecurity using the Davy and Brockner items, "affected" status was used and means and SD are reported in Table 7. *university based sample experiencing organizational restructuring and downsizing (Donaldson, 1996). Kelloway & Barling (1991) sample of hospital employees; no comparisons of Public Service samples on role stress appraisal variables were possible for the Rizzo et al (1970) measures.

Appendix N.03

**Comparisons from Previous Research and Sample Statistics (Means & S.D.):
Coping Resources and Response Measures**

Measure	Reference	Published Mean	Published S.D.	Study Mean	Study S.D.
Perc. Org. Support (POS) ^a	Eisenberger, et al., (1986) (averaged over 9 samples, n=361);	35.81	7.96		
	Eisenberger, et al., (1990)(averaged over 6 samples, n=237);	36.97	9.39		
	^a Donaldson (1996) (n=225)	27.15	16.6	33.46	10.43
Perc. Org. Control	Ashford, et al., (1989) (n=183)	9.0	2.6	5.89	1.81
Efficacy	Ashford (1988) (n=180)	15.80	2.50	9.03	3.06
Prev. Health Behaviours	Vickers, et al., (1990) (3 samples: n=1,417 n=316 n=95)	49.16	12.74		
		49.82	12.18		
		51.18	11.68	35.76	11.01
Coping Style	Correspondence with Miller, 1992 - 7 samples averaged (n=733)				
Monitoring		9.84	3.25	9.28	2.70
Blunting		4.12	2.32	2.46	2.46
Cognitive Avoidance	Ashford (1988) (n=180)	7.42	2.44	8.87	2.80
Information Seeking	Ashford (1988) (n=180)	7.75	1.37	5.87	2.41
Emotional Discharge	Ashford (1988) (n=180)	9.53	2.42	8.52	3.22
Cognitive Redef.	Ashford (1988) (n=180)	3.60	1.03	2.61	1.27

Note: N=224 for the present study; M=male, F=female; NA indicates "not available".

^auniversity based sample experiencing organizational restructuring and downsizing (Donaldson, 1996).

^bPOS (Perceived Organizational Support) (Eisenberger et al., 1986, 1990) 8 items on 7 point scale, Perceived Organizational Control measured with Powerlessness Scale a 3 item, 4 point scale (Ashford, Lee & Bobko (1989); Efficacy refers to Change-specific Efficacy scale 4 item, 5 point scale (EFFICATO) (Ashford, 1988); Preventive Health Behaviours (HBPREEN) 16 item, 5 point scale from the Health Behaviours Checklist (Vickers et al., 1990).

APPENDIX O:

Most Commonly Reported Physical Health Symptoms (CHIPS)

Appendix O
Most Commonly Reported Physical Symptoms (CHIPS)

Symptom	Percentage of Sample Reporting Symptom ^a	Percentage of Sample Reporting Extreme Discomfort ^b
Low in energy	85.6	15.8
Constant fatigue	82.0	16.2
Sleep problems	73.0	12.2
Headaches	66.7	7.2
Muscle tension/soreness	66.7	7.2
Back pain	60.4	8.1
Stuffy head or nose	59.3	6.8
Cold or cough	57.2	7.2
Weight change	55.4	10.8
Acid stomach or indigestion	50.0	5.4

Note: N=222

^a includes all scores other than 0 (not bothered);

^b includes scores of 4 (extreme bother);

IMAGE EVALUATION TEST TARGET (QA-3)

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