Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

A SURVEY OF MENTAL HEALTH IN THE WORKPLACE: A HUMAN RESOURCE PERSPECTIVE

A thesis presented in partial fulfilment of the requirements

for the degree

of Master of Arts

in Psychology at Massey University

Nadine T. Ripley 1997

ACKNOWLEDGEMENTS

I would like to take this opportunity to thank those people, whose unique contributions made the completion of my Masterate thesis possible. Firstly, I would like express my gratitude to Dr Hillary Bennett for her much appreciated supervision, support and encouragement throughout my Masters degree studies and particularly during my thesis year. I would also like to thank Dr Philip Voss to whom I am indebted, for his patient statistical consultation that brought the results of my questionnaire to life.

I would like to thank Wendy Cocks, the Executive Officer and the Research Committee of the Institute of Personnel Management New Zealand Incorporated for their pivotal role in my research. Additionally, I would like to acknowledge the Massey University Graduate Research Fund and the Massey University Psychology Department, Albany who provided the funding for my study.

I would like to give my heartfelt thanks to my parents, Garth and Gloria, for the abundance of support, understanding and enthusiasm that they have always given me and to whom I am indebted for enabling me to pursue a tertiary education. I would also like to thank Johnny, who was a source of constant support and encouragement, for listening to me when all I could talk about was occupational mental health issues.

TABLE OF CONTENTS

Acknowledgements	ii
Table of Contents	iii
List of Tables	viii
List of Figures	xi
Abstract	xii
CHAPTER ONE: INTRODUCTION	
The Relevance of Mental Health to the Workplace	1
CHAPTER TWO: LITERATURE REVIEW	
<u>Definitions</u>	6
The meaning of work	6
Mental health	7
Occupational mental health	8
Occupational stress	9
The Prevalence of Poor Mental Health in the Workplace	11
Psychological/emotional issues	11
Alcohol abuse and chemical dependency	12
The Costs Associated with Poor Mental Health in the	
Workplace.	14
Psychological/emotional issues	14
Alcohol abuse and chemical dependency	15

The Law of Employment and Mental Health
A Model For Occupational Well-Being,
Mental Health Promotion and Distress Prevention
Occupational Stressors: Definitions and Impact
on Mental Health
Work mental health risks
Non-work mental health risks
Categorisation of Mental Health Outcomes in
the Workplace
Psychological/emotional issues
Alcohol abuse and chemical dependency
The Impact of Poor Mental Health on
Individual Outcomes 35
Psychological/emotional issues
Alcohol abuse and chemical dependency
The Impact of Poor Mental Health on
Organisational Outcomes. 37
Psychological/emotional issues
Alcohol abuse and chemical dependency
Work-Based Intervention Strategies addressing
Work-Dased Intervention Strategies addressing
Occupational Mental Health Issues
Occupational Mental Health Issues 38

The Efficacy of Primary, Secondary and	
Tertiary Interventions 4	7
Primary interventions	7
Secondary interventions	8
Tertiary interventions	9
Organisational versus Individual Level Interventions 4	9
·,	
The Present Study. 5	1
Justification	1
Aims and objectives	3
CHAPTER THREE: METHODOLOGY	
Method. 5)
<u>Sample</u>	6
General demographic characteristics of the sample	
Relationships between demographic variables	
Relationships between demographic variables	7
Procedure	1
Measures 6	2
The questionnaire	
Questionnaire design and content	52
Questionnaire construction issues	10
Data Analysis	15
Quantitative data	15
Qualitative data 7	75

CHAPTER FOUR: RESULTS

<u>Descriptive Statistics</u> .	77
Perceived responsibility to address occupational mental health	
issues	77
Perceived prevalence of poor mental health in the workplace	79
The perceived impact of work factors and non-work factors on	
employee mental health	84
The perceived impact of poor employee mental health on	
organisational outcomes and individual outcomes	89
The implementation of interventions addressing occupational	
mental health issues	91
The perceived effectiveness of interventions addressing	
occupational mental health issues	98
Employee Assistance Programme service surveys	103
Human Resource practitioners' perceived ability to address	
occupational mental health issues.	106
Composite Variable Analyses.	110
Relationships between composite variables	112
Inferential Statistics	114
Demographic differences	114
Demographic cross-tabulations	115
Factor Analysis	118
CHAPTER FIVE: DISCUSSION	
Objectives.	120
Responsibility to address occupational mental health issues	120
Prevalence of poor mental health in the workplace	122
The impact of work and non-work factors on employee	
mental health	126

The impact of poor employee mental health on organisational	
and individual outcomes	128
The implementation of work-based interventions addressing	
occupational mental health issues	129
Future implementation of work-based interventions addressing	
occupational mental health issues	134
The effectiveness of work-based interventions addressing	
occupational mental health	135
Demographic differences 1	138
CHAPTER SIX: CONCLUSION	
Recommendations for Organisations	142
Recommendations for Future Research	143
References 1	144
Appendices 1	157

LIST OF TABLES

Table 1	Demographic characteristics of sample 58	8
Table 2	Categories of Human Resource practitioners' perceptions	
	of organisational responsibility to address mental health	
	issues 78	8
Table 3	Frequency distributions of the extent to which the Human	
	Resource practitioners perceive chemical dependency,	
	alcohol abuse and psychological/emotional issues as	
	problems in the workplace 80	0
Table 4	Frequency distributions of the extent to which the Human	
	Resource practitioners perceive the prevalence of anxiety,	
	burnout, depression, chemical dependency and	
	alcohol abuse in the organisations in which they work 8	1
Table 5	Outcomes perceived as prevalent amongst employees by	
	respondents82	2
Table 6	Categories of respondents' perceptions of the seriousness	
	of poor mental health in the workplace in terms of	
	warranted intervention 83	3
Table 7	Categories of respondents' perceptions of the most	
	appropriate person/s to intervene and address workplace	
	mental health issues	5
Table 8	Percentages of Human Resource practitioners who perceive	
	Work Factors as having a high or very high impact on	
	employee mental health	6
Table 9	Percentages of Human Resource practitioners who	
	perceive Non-Work Factors as having a high or very high	
	impact on employee mental health	7
Table 10	Clustering of Work Factors and Non-Work Factors	
	according to percentages of respondents who perceive these	
	factors as having a high or very high impact on employee	
	mental health	8

Table 11	Percentages of respondents who perceive poor employee	
	mental health as having a high or very high impact on	
	Organisational Outcomes and Individual Outcomes	90
Table 12	Clustering of respondents' perceptions of poor employee	
	mental health as having a high or very high impact on	
	Organisational Outcomes and Individual Outcomes	91
Table 13	Primary, Secondary and Tertiary Interventions that have	
	been implemented in the organisations in which the	
	respondents work	93
Table 14	Primary, Secondary and Tertiary Interventions that	
	respondents would consider implementing in the future	94
Table 15	Organisational levels that generally have access to	
	Secondary and Tertiary Interventions	96
Table 16	Groups of individuals who have had access to already	
	implemented interventions	96
Table 17	Categories of respondents' justification as to why any of	
	the Primary, Secondary and Tertiary Interventions had	
	never been implemented in the organisations in which	
	they work	97
Table 18	Percentages of respondents who perceive Primary,	
	Secondary and Tertiary Interventions as being effective or	
	very effective in addressing occupational mental health	
	issues	100
Table 19	Clustering of Primary, Secondary and Tertiary Interventions	
	according to percentages of respondents who perceive these	
	interventions as being effective or very effective in	
	addressing occupational mental health issues	101
Table 20	Categories of additional interventions that respondents'	
	perceive as effective in addressing occupational mental	
	health issues	104
Table 21	Categories of respondents' perceptions of the worthwhile	
	nature of surveys to ascertain employee needs for	
	Employee Assistance services	105

Table 22	Categories of Human Resource practitioners' perceptions	
	of their ability to address occupational mental health	
	issues	108
Table 23	Categories of Human Resource practitioners' comments on	
	training that would equip them to address occupational	
	mental health issues	109
Table 24	Sample sizes, minimums, maximums, means and standard	
	deviations for composite variables	111
Table 25	Pearson product momement correlations between composite	
	variables and sample sizes	113
Table 26	ANOVA F values for each of the composite variables 1	114
Table 27	Mean composite variable scores and standard deviations for	
	females and males	115
Table 28	Eigenvalues and proportions of variance explained	
	for the four Factors retained following a varimax rotation 1	119

LIST OF FIGURES

Figure 1	A model for occupational well-being, mental health			
	promotion, and distress prevention	18		
Figure 2	A model of the sources of stress.	21		
Figure 3	A model of occupational mental health: dimensions and			
	indicators	65		
Figure 4	Order of questionnaire sections	73		

ABSTRACT

The present study is exploratory in nature, utilising the survey method of research to address the topic of occupational mental health. This theme within the broader topic of occupational health and well-being has not previously been explored through the use of a quantitaive or qualitative research method in the New Zealand workplace. A questionnaire was constructed to elicit information and develop an understanding of Human Resource practitioners' perceptions and practice concerning various occupational mental health issues. The sample consisted of 625 randomly selected Human Resource practitioners within the Auckland and Wellington regions of New Zealand. The final number of participants who responded to the survey was 164. The Human Resource practitioners acknowledged that organisations have a responsibility to address mental health issues in the workplace. Psychological/emotional issues were perceived as prevalent. The Human Resource practitioners demonstrated an understanding of the high impact of work and non-work stressors on employee psychological health as well as the negative impact that poor employee mental well-being has on organisational outcomes and individual outcomes. Human Resource practitioners perceived primary interventions to be most commonly implemented, followed by tertiary interventions and secondary interventions. Employee Assistance Programmes were reported to be the most prevalent intervention and were perceived to be effective in addressing mental health in the workplace. The implications of the study include the need for an increased understanding of work-based interventions addressing mental health in the workplace to enable the Human Resource practitioners to make informed contributions to organisations taking responsibility to address occupational mental health.

CHAPTER ONE

The Relevance of Mental Health to the Workplace

In today's competitive economic environment, a major goal of most organisations is enhanced productivity. Alongside this goal is the realisation that the workplace is becoming a "principal forum for measuring and promoting physical and mental health" (Millar, 1990, p.1166). It is argued that as organisations become more aware of the economic burden associated with occupational ill health in terms of lost productivity, the issue of promoting employee health will be more aggressively pursued (Millar). According to White (1983), the realisation that the good physical and mental health of employees is in the best interest of organisations is exemplified in the notion that "unhealthy workers are less productive than healthy ones" (White, p. 3).

Studies concerning the mental health of workers in industrialised society has shifted significantly over the past decade. According to Gavin (1975), emphasis has shifted from the individual level of analysis to the level of the organisation and its environment as important determinants of employee mental health. In part, this shift in attention stems from an acknowledgement that poor mental health impacts not only upon the well-being of the individual, but also upon the effectiveness of the organisation (see DeFrank & Cooper, 1987; Ivancevich, Matteson, Freedman, & Phillips, 1990; Sauter, Murphy, & Hurrell, 1990; Sperry, 1991; Zolkos, 1994).

Although researchers still have much to discover about the complex interrelationship between workplace stress and psychological symptoms, recent organisational and social psychological literature (e.g. Keita & Hurrell, 1994; Levi, 1994; Murphy, 1995; Sauter et al., 1990) highlight the fact that the workplace is undergoing change consistent with economic, technological and workforce demographic trends. It is argued that these changes may result in increased levels of work related stress (Sperry, Kahn, & Heidel, 1994) and risk for psychological disorders for employees (Sauter et al., 1990). It is acknowledged that a variety of occupations and industries within the economy experience work stress, placing employees at increased risk psychologically,

however, the more evident trends and resultant workplace changes affecting specific groups of employees are outlined here.

An expansion of certain occupations points to estimations that one half of the fastest growing occupations are related to the health and computer fields (Sauter et al., 1990). Research (e.g. Rees & Cooper, 1992) has shown that individuals in the health service profession have consistent elevated risks for psychological disorders. Additionally, the increased use of computers in the workplace is predicted to contribute to job displacement, deskilling and lower paid jobs, all of which have effects on psychological well-being (Sauter et al., 1990).

There is a rapid increase in the number of individuals employed within the service sector of the economy. Ninety percent of all new jobs between 1990 to 2005 are expected to be within the service industry (Keita & Hurrell, 1994). In New Zealand, the labour market is dominated by service sector employment (Sayers & Toulson, 1995). This expansion and dominance has central implications concerning the kinds of jobs that are available, the type of employees that are employed and the characteristics of the workplace. Research has revealed that the service sector has been shown to be at increased risk for psychological disorders (e.g. Colligan, Smith, & Hurrell, 1977; Eaton, Anthony, Mandel, & Garrison, 1990). According to Keita and Hurrell (1994), burnout appears to be a problem for this sector of the workforce. Furthermore, individuals employed within this sector are estimated to receive inferior compensation and benefits in comparison to individuals employed within the traditional industrial and manufacturing sectors of the economy (Sauter et al., 1990).

It has been projected that women will compose approximately 47% of the workforce by the year 2000 (Sauter et al., 1990). In New Zealand, it is predicted that women's labour force participation will continue to increase by 24% from 1988 to 2031, while male labour force participation will increase by 14% (Sayers & Toulson, 1995). These projections highlight the changing demographic characteristics of the workforce which may have an adverse impact on employee mental health. This impact may be attributed to role demands inherent in balancing the demands of work and family life and constrained occupational opportunities for both men and women (Sauter et al., 1990).

Sauter and his colleagues (1990) identify an additional trend which underlines the fact that the five occupations with the greatest number of new jobs in the United States by 1995 are jobs characterised by limited opportunity for growth and development and limited availability of benefits. It is argued that these job characteristics may constitute occupational stressors (Cooper, 1983) which may negatively affect individual mental health outcomes. These jobs include: cashiers; registered nurses; janitorial workers; truck drivers; waiters and waitresses (Sauter et al., 1990).

These trends and associated changes in work structures and processes, coupled with estimations of the prevalence (e.g. Greenberg, Finkelstein, & Berndt, 1995; Bromet et al., 1990) and costs (e.g. Martino, 1992; Sperry, 1991) associated with poor mental health and occupational stress in the workplace emphasise the relevance of these issues to the workplace. This relevance is further reinforced by the fact that the American National Institute for Occupational Safety and Health (NIOSH) have categorised psychological disorders as one of the ten leading work-related outcomes in the United States (Millar, 1990).

Although there appears to be a growing understanding of the importance of occupational mental health (Kelloway & Barling, 1991; Mickleburgh, 1986; Millar, 1990) and awareness of the dysfunctional impact of work stress on both individual and organisational outcomes (e.g. Cooper & Cartwright, 1994), Williams (1994) argues that occupational mental health is an issue which many organisations are reluctant to address. "It is acknowledged that it is an employer's duty to provide a safe environment for their employees and there is a general acceptance of the need to promote good physical health, however the promotion of mental health at work is more controversial" (Williams, p.19).

Even though the definition of health has been extended to include physical, social and mental well-being, organisations have been slow to address anything other than hazards to physical health (Williams, 1994). Jacobson's national survey of forty-eight Fortune 1000 companies in the United States (American Psychological Association/American National Institute for Occupational Safety and Health [APA/NIOSH], 1992) found that 'improve mental health' was ranked as the third highest health priority despite the fact that

mental health initiatives were not reflected in the top six worksite health promotion programme activities or supporting policies.

In Northern Ireland, McHugh and Bryson (1992, cited in Daniels, 1996) conducted a survey of management perceptions of stress. They found that 70% of the managers in their sample believed that employees in their organisations experienced stress in the workplace. Eighty-four percent perceived stress to be a problem for both individuals and organisations. Despite these percentages, the study revealed an alarming result: less than seven percent of the sample reported that their organisation had procedures in place for identifying stressed employees, and less than five percent reported that their organisation had implemented stress management programmes. The explicit conclusion to these results was that managers are not managing the problem of workplace stress.

In an attempt to explain the rarity of workplace stress management interventions encompassing organisational-level interventions, Daniels (1996) proposes two perspectives based on risk perception: the psychometric view and the cultural view. The psychometric view points to management underestimation of the consequences of occupational stress which reinforces the perception that stress is an issue which requires minimal, if any intervention. The survey conducted by McHugh and Bryson (1992, cited in Daniels) supports this view as does the argument made by Williams (1994) that organisations are reluctant to address vague health risks such as stress and mental health in the workplace.

The cultural perspective (Daniels, 1996) suggests that managers may ignore the risk of occupational stress. According to Daniels, this ignorance stems from the dominant 'individualist' philosophy of managerial and professional cultures. It is a philosophy that looks favourably upon autonomy, competition and individualism in organisational life. As a result, stress management is perceived to be inappropriate since coping with stress should be an individual's responsibility and not an organisational management responsibility.

Daniels (1996) makes the conclusion that there is a need to obtain a greater understanding on how managers perceive the risks of stress and the costs and benefits associated with various stress management interventions or mental health programmes. Daniels additionally underlines the importance of exploring how managers' perceptions differ from academic literature and the perceptions

of other parties to organisational politics. It is argued that these efforts would lead to a greater understanding of managerial concerns and would be crucial to the identification of gaps in managers' knowledge of occupational stress and its associated outcomes (Daniels).

CHAPTER TWO: LITERATURE REVIEW

Definitions

The Meaning of Work

The concept of work can be described by a multiplicity of definitions. The definitions and concepts associated with 'work' deal with individual processes, such as perception and action as well as the social context and roles through which individual behaviour is articulated (Herr & Cramer, 1992). As a result, an understanding of work requires comprehension at the individual, social and contextual levels as well as an appreciation of the purpose of work (Herr & Cramer). Within the broad spectrum of the concept of work and the activities that are associated with its definitions, the activities performed within the context of an employment relationship constitute a relatively small area (Shain, 1996). It is within this context of paid work that individual needs, both economic and non-economic may be attained or thwarted. It is a context characterised by dynamic interactions at the level of the individual and the psychosocial and physical environment in which the employment relationship These interactions are in turn, pivotal to the understanding of develops. individual responses to work.

From this perspective, paid work plays a major role in the lives of most members of modern industrial society, providing not only financial reward, but also a sense of identity and an opportunity for self development and enhancing self-esteem (Spurgeon & Barwell, 1995). Work allows for social interaction, a sense of belonging and responsibility. It can also provide a sense of competency and mastery, dependability and self-efficacy (Herr & Cramer, 1992). Work, therefore can provide a positive contribution to financial, social and psychological well-being. With regard to the latter however, some manifestations of work contribute more to psychological well-being than others (Shain, 1996). These manifestations as they occur within the individual and social dynamics of employment, provide a platform from which to explore the implications for work and mental health.

Mental Health

The issue of defining 'mental health' remains difficult and confusing. Typically, proposed definitions include a mixture of factual and value statements (Spurgeon & Barwell, 1995) which only add to the controversial issue of defining 'normality'. Despite such ambiguity and controversy, an approach has emerged which attempts to define mental health by identifying the positive factors associated with healthy mental functioning. Therefore, it is argued that the mentally healthy individual "has a realistic perception of reality, is self-aware, can voluntarily control his or her behaviour, is socially effective, has adequate self-esteem, is able to form affectionate relationships and is actively productive" (Spurgeon & Barwell, 1995, p.104).

Warr (1994) provides a useful approach in an attempt to address the nature of mental health in the identification of five main components of mental health. These components include affective well-being, competence, aspiration, autonomy and integrated functioning. Affective well-being may be divided into two separate dimensions referred to as 'pleasure' and 'arousal'. identification of these two dimensions allows for the measurement of affective well-being in terms of both context-free and job-related well-being. Competence refers to the individual's ability to cope with environmental stressors with a moderate amount of success. Competence and affective well-being are linked, affect being pivotal to the identification of competence as an element of mental health. Aspiration, the third aspect of mental health outlined by Warr refers to the ability to establish realistic goals and actively pursue them. The component of autonomy is best understood along a continuum, where mental health is characterised by a balance between interdependence and independence which are found between the poles of extreme dependence and extreme counterdependence.

Warr (1994) emphasises that the separate components of mental health are not always necessarily positively intercorrelated, thereby acknowledging that an individual may be considered healthy in terms of certain components, while still being affected by characteristics associated with lower levels of mental health. It is important to acknowledge the fact that mentally healthy individuals may experience mental strain when dealing with their environment. The presence

of mental strain is therefore not necessarily indicative of poor mental health. It is only when the mental strain is sufficiently severe as to cause dysfunction, or is prolonged, that it may be associated with mental health disorders (Warr).

Occupational Mental Health

"The workplace becomes an environment in which both positive and negative, healthy and unhealthy, good and bad outcomes are simulated; a context in which conflicts, thwarted ambitions, and emotional distress from one's life outside that workplace can be brought into the workplace to shape one's life as a worker. As such, the workplace becomes a crucible for mental health issues that revolve around work ..." (Herr & Cramer, 1992, p.84).

Occupational mental health refers to a major theme within the broader topic of occupational health and well-being. It is an area that is concerned with the work environment and the way in which it affects employee thought, emotion and behaviour (Mickleburgh, 1986). Occupational mental health practice addresses the way in which the workplace influences personal well-being and job performance and emphasises both the important meaning work has for many individuals and the difficulties that ensue when individual responses to the demand of work translate into work dysfunction and poor mental health (Lowman, 1993).

Despite a focus on the work environment, the area of occupational mental health is characterised by an acknowledgement of the interplay of work and nonwork factors in the contribution and development of poor mental health (Mickleburgh, 1986). This acknowledgement underscores the difficulty of attributing poor psychological well-being exclusively to either domain (Sauter et al., 1990). Occupational mental health practice does however, focus on psychological outcomes in the occupational health arena that are amenable to workplace interventions regardless of a clear occupational basis (Sauter et al.). As a result, "occupational mental health is a rubric for creating psychologically healthy work environments" (APA/NIOSH, 1992, p.37). Creating such an environment requires the promotion of conditions favourable to mental health in the workplace and the identification and modification of unfavourable conditions (Mickleburgh, 1986).

According to Cox (1997), work design, the work environment and the organisation play an important role in the determination of individuals' quality of The American Psychological Association along with the National health. Institute for Occupational Safety and Health in the United States (1992) argue that "work-related occupational factors are etiologic agents for psychological disorders" (p.38). Therefore, due to the fact that organisations can be characterised by conditions that constitute risks to health, they have a responsibility to manage and reduce that risk (Cox, 1997). The practice of occupational mental health addresses these risks and workplace behaviour that stimulate healthy behaviour as well as individual adaption to the work environment, organisational structure and their interaction. Such practice is additionally concerned with the way in which prevention, education and treatment can contribute to mentally healthy individuals and organisations (Sperry et al., 1994).

Occupational Stress

Defining stress remains a controversial issue, surrounded by complex debate. Beyond this debate however, is agreement of a definition of stress that includes "...a perceived imbalance in the interface between an individual and the environment and other individuals" (Martino, 1992). Modest agreement also asserts that stress involves a combination of an environmental stimulus or stressor, an individuals response either physical or psychological to such stimuli or the interaction between the two (Ivancevich et al., 1990). Research has tended to focus on the physiological, psychological or behavioural outcomes resulting from aversive exposure to environmental stimuli. In turn, a large amount of research literature is concerned with the ways in which individuals cope with stressful experiences (Ivancevich et al.).

Stress is not necessarily a purely negative circumstance and some amounts of stress are normal and necessary to individual well-being (Fletcher, 1994; Martino, 1992). However, "if stress is intense, continuous or repeated, if the

person is unable to cope or if support is lacking, then stress becomes a negative phenomenon leading to physical illness and psychological disorders" (Martino, 1992, p.4).

The implication of stress in the workplace as a causal factor in the manifestation of illness and disease is well established in the organisation and social psychological literature (Lowman, 1993). With regard to mental health outcomes, it is commonly suggested that "...job related stress is implicated in a number of other emotional problems, such as anxiety, depression, and substance abuse..." (White, 1983, p.6). Mendelson (1990) points to the emotional effects of occupational stress and identifies these effects in terms of affective disturbances, behavioural manifestations and psychiatric disorders. According to Mendelson, occupational stress may be implicated in the development of almost any of the psychological disorders listed in the Statistical Manual of Mental Disorders.

The causes and consequences of stress in the workplace are many and varied and have been linked to a variety of individual responses (Dewe, 1989). It is also acknowledged that stress goes beyond the workplace in that non-work stressors may interact either positively or negatively with work stressors and as a result may affect individual performance at work (Martino, 1992). Recognition of the costs of stress to organisations along with an appreciation of the dynamic relationship between stressors and stress responses has led to an emerging approach which focuses on the prevention of stress in the workplace rather than merely reactively treating individuals in distress. The concept of health that has informed this emergence acknowledges both the physical and psychosocial work characteristics that play a role in the etiology of work-related psychological disorders (APA/NIOSH, 1992).

Research on occupational stress, mental health in the workplace and the current understanding of psychological health processes has in turn led to suggestions detailing key elements in work-based prevention strategies addressing psychological issues. These suggestions underscore the relationship between occupational stress and occupational mental health.

The Prevalence of Poor Mental Health in the Workplace

According to Sauter et al. (1990), "...work-related psychological disorders appear to be a rapidly developing problem lacking complete definition in terms of scope and etiology..." (p. 1146). This is reflected in the fact that surveillance and epidemiological data on actual psychological disorders in the workplace are limited (Sperry et al., 1994). This lack of basic data on the prevalence of mental health problems among employee groups exists in many countries including the United States (US) and New Zealand. Estimations do however exist on the prevalence rates of psychological/emotional issues, alcohol abuse and chemical dependency in certain populations, the majority of which are generalised populations. These estimations are as follows:

Psychological/Emotional Issues

A large majority of surveillance data regarding the prevalence of psychological/emotional issues centre around the prevalence rates of depressive and anxiety disorders. In the United States, Bromet and his colleagues (1990) recognised the lack of surveillance data despite the fact that programmes addressing employees with psychological and substance abuse problems are proliferating. They designed a study to fill the void between perceived need and programme development by determining the risk factors for and prevalence of depression and alcohol abuse/dependence in a managerial workforce (Bromet et al.). The results of the study revealed that the lifetime and one year prevalence rates of DSM-III-R (American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, 1987) major depression were 23% and nine percent respectively among men and 36% and 17% respectively among women.

At the level of community populations in the United States, Greenberg, Stiglin, Finkelstein, and Berndt (1993) provide estimates on the number of people who suffer from depression. It is estimated that almost six percent of the population suffered from depression in 1990. Approximately 72% of this population are estimated to be in the labour force (Greenberg et al.). Greenberg and his colleagues also estimate that approximately 70% of all depressed adults

are below the age of 45, and approximately 70% of depression sufferers are female. They conclude that "On the basis of prevalence, depression certainly ranks with some of the most widespread, and more familiar, public health concerns" (Greenberg et al., p. 421).

Data from the Equitable Life Insurance Employee Assistance Programme (cited in Sperry et al., 1994) indicated that 25% of presentations were anxiety disorders, 20% were depression and 15% were stress-related disorders. Although these are not clinical diagnoses, they are indicative of serious issues.

A study was carried out by the London-based Harris Research Organisation which included New Zealand in a 16 country survey of occupational stress. The results of the study indicated that New Zealand office workers were among the most stressed in the world, with 60% of the New Zealand respondents citing work as their current major cause of stress (see Sullivan, 1995).

In New Zealand, a study was undertaken in a Christchurch community population to remedy the lack of data concerning the prevalence of a number of psychological disorders including affective, anxiety, eating and substance abuse disorders (Wells, Bushnell, Hornblow, Joyce, & Oakley-Browne, 1989). The results of the study indicated that the highest lifetime prevalences found were for generalised anxiety, affecting 31% of the sample population. Major depressive episode affected 13% of the sample population. In terms of the demographic characteristics of the sample population, it was found that women had higher rates of affective and anxiety disorders. What is of particular interest is the finding that "compared with results from the Epidemiologic Catchment Area Program, Puerto Rico and Edmonton, Christchurch has the highest rates for major depression ..." (Wells et al., 1989, p.315).

Alcohol Abuse and Chemical Dependency

The above mentioned study conducted by Bromet and his colleagues (1990) revealed that the lifetime and one year prevalence rates of DSM-III-R alcohol abuse/dependence were 16% and four percent for men and nine percent and four percent for women in the managerial workforce that they studied. The

high rates of major depression and alcohol abuse/dependence in this study suggested that services are required for managers and professionals.

The Christchurch Epidemiology study (Wells et al., 1989), revealed that alcohol abuse/dependence, affected 19% of the sample population. Demographic information revealed that men had the highest rates of substance abuse when compared to the women in the sample. As with depression rates, the Christchurch sample was amongst the highest for alcohol abuse/dependence when compared with various other overseas research.

In New Zealand, Inkson (n.d. cited in Harris & Trusty, 1997) conducted a survey of alcohol programs and practices in companies with 100 or more employees. Although the study was not epidemiological in nature, it highlighted workplace perceptions of the prevalence of alcohol abuse. The results of the study revealed that respondents perceived alcohol to be a relatively unimportant problem in the workplace. Fifty-three percent of the respondents indicated that alcohol abuse was a 'minor' problem and almost 20% indicated that alcohol abuse was not a concern. Only two percent of the sample population perceived alcohol abuse as a major concern. On commenting on the Inkson study, Harris and Trusty conclude that there appears to be far less emphasis on substance abuse issues in the New Zealand workplace in comparison with the United States.

Although no surveillance data on the prevalence of mental health disorders in the workplace itself exists in New Zealand to date, the prevalence rates revealed by the Christchurch psychiatric epidemiology study can be argued to provide an approximation of the relevance of mental health to the Christchurch and the larger New Zealand community. It may be argued that a significant number of the sample population used in the Christchurch study are members of the working population. This argument is reinforced by a report issued by the International Labour Organisation and World Health Organisation stating that approximately 70% of people with alcohol or substance abuse problems are in full-time employment (see Tollestrup, 1994a). Similarly, approximately 72% of people suffering from depression are estimated to be in the labour force (Greenberg et al., 1993). If this is the case, mental health issues in the New Zealand workplace are relevant to individual and organisational wellbeing as is reflected in the experience of other Western industrialised countries.

The Costs Associated with Poor Mental Health in the Workplace

The adverse effects of poor mental health and occupational stress for individuals and organisations are reflected in both direct and indirect costs. The direct costs of illness to employers refer to costs that require visible monetary outlays (Greenberg et al., 1995). For example, in the United States alone, it is estimated that the direct financial costs of mental disorders is in excess of US\$36 billion, while the combined cost of physical health problems related to psychological disorders ranges from US\$50-\$100 billion annually (Sperry, 1991). Indirect or 'hidden' costs refer to additional employer costs which include losses associated with decreased productivity, increased absenteeism, impaired judgement and concentration (Greenberg et al., 1995). Estimations of the direct and indirect costs associated with psychological/emotional issues, alcohol abuse and chemical dependency are as follows:

Psychological/Emotional Issues

The majority of the literature providing estimations of the costs associated with psychological/emotional issues were found to concentrate on the costs associated with depression. Data concerning the costs associated with additional psychological/emotional issues was limited. Each year, in the United States, depression alone affects at least 11 million Americans. Almost three quarters of the costs that this mental state incurs are indirect. That is, they include the lost output that results from the illness (Greenberg et al., 1995). Greenberg and his colleagues have suggested that approximately 2.25% of available work time in the American labour force is adversely affected by depression symptoms each year. An average performance reduction during the working year of 20% results in costs totalling US\$12.1 billion due to worker impairment and approximately US\$11.7 billion in costs from absenteeism associated with episodes of depression.

As demonstrated by these cited figures, many of the inherent characteristics of depression imply high workplace costs due to its effects. According to Greenberg et al. (1993), depression in the workplace results in

significant productivity losses and accounts for the remaining 55% of the United States' total cost-of-illness estimate.

The indirect financial costs for occupational stress and mental health disorders in the United Kingdom has been estimated at more than five billion pounds annually (Martino, 1992). Statistics for the United Kingdom also indicate that psychoneurosis results in the loss of 30 million working days a year. This figure excludes the cost of lost productivity and decreased efficiency (Martino).

Upon viewing these estimations on the costs associated with poor mental health in the workplace, it should be noted that individuals suffering from poor mental health conditions tend not to seek professional care. This would indicate that in many instances, the workplace costs would be higher as employees attempt to perform their responsibilities at work while suffering from sometimes debilitating symptoms (Greenberg et al., 1993). This conclusion remains: "epidemiologic and health care data on costs are accumulating to provide an increasingly clear picture of the occupational relevance - both cause and costs - of psychological disorders" (Sauter et al., 1990, p.1148).

Alcohol Abuse and Chemical Dependency

The economic costs of employee substance abuse are equally staggering. Although precise annual loss figures due to substance abuse is near impossible to determine, the most commonly cited figures in US dollars are 30 billion dollars of lost productivity attributable to illegal drug use and 60 billion dollars in lost productivity due to alcohol abuse (Harris & Heft, 1992). In New Zealand, it is estimated that the cost to industry from alcohol abuse and drug dependency is \$1.5 billion a year (see Pogson, 1996). Research studies generally agree that employees involved in substance abuse characteristically have twice as many lengthly absences, use double the amount of sick days and benefits, are much more likely to be involved in accidents and work at approximately 75% of their productive capability (National Institute on Drug Abuse cited in Banta & Tennant, 1989).

Although New Zealand data outlining the estimated costs of poor mental health, substance and alcohol abuse in the workplace is limited, the experience of other industrialised countries should not be ignored. Greenberg and colleagues (1995) make the point that in addition to recognising the economic consequences of poor mental health and related issues, it has become equally, if not more important to recognise that investing in an employee's health, which includes mental health, has far reaching positive implications in the workplace itself.

The Law of Employment and Mental Health

In a number of countries, statutory provisions have been adopted by legislators to address the issue of mental well-being in the workplace. These provisions acknowledge psychosocial risk factors in the workplace (Martino, 1992) and recognise occupational stress as constituting injury for workers compensation claims (Bateman, 1996). The Occupational Safety and Health Act which was passed in the United States in 1970 contains the requirement that investigations concerning psychological factors at work must be carried out (Martino). The 1974 Health and Safety at Work Act in the United Kingdom, addresses both physical and mental well-being where the definition of personal injury is extended to include any physical or mental condition impairment (Martino).

Rules and regulations addressing the work environment have been implemented in a number of countries. Many of these rules and regulations are concerned with facilitating the identification of stress-related problems and preventative measures to be applied in the workplace (Martino, 1992). Norway, Sweden and Germany are just three countries which have introduced these regulations in the workplace (Martino).

The New Zealand Health and Safety in Employment (HSE) Act 1992, came into force on the 1 April 1993 (Walsh, 1996). 'Harm' is described in Section Two of the Act as "illness, injury, or both" (HSE Act, 1992, p.4). An illness is a disease and an injury denotes an instance of physical harm or damage (Walsh, 1996). The definition of 'hazard' in Section Two of the Act is "an activity, arrangement, circumstance, event, phenomenon, process, situation or substance (whether arising or caused within or outside a place of work) that is an actual or potential cause or source of harm..." (HSE Act, 1992, p.4).

The HSE Act defines all practicable steps to be taken by employers to ensure the safety of employees. These steps include: providing and maintaining a safe working environment; providing and maintaining for employees while they are in the work environment for their safety and health; ensuring that that plant used by any employee at work is safe for the employee to use in terms of the way in which it is arranged, maintained, designed and made; ensuring that while at work, employees are not exposed to hazards that have arisen out of the arrangement, disposal, manipulation, organisation, processing, storage, transport, working, or use of things and the development of procedures designed to deal with emergencies that may occur while employees are at work (HSE Act, 1992).

According to Professor Hodge of the Law Department at Auckland University, New Zealand (1996), "There is no logical reason why risk of psychiatric damage should be excluded from the scope of an employer's duty of care or from the co-extensive implied term in the contract of employment" (p.17). Hodge makes the point that before a problem concerning mental well-being in the workplace becomes acute, Occupational Health and Safety could issue improvement or prohibition notices, or take a case to court under Section Six of the HSE Act if an employer fails to eliminate, minimise or isolate a hazard to mental health.

Traditional Occupational Health and Safety practice in New Zealand has focused on the physical working environment, however, it has been argued that psychological health issues are becoming increasingly important in the workplace (Bateman, 1996). More recently, New Zealand Occupational Health and Safety has been reported to be taking into careful consideration the issue of occupational stress and the question of employers' responsibilities (Pogson, 1996). Bateman (1996) has reported that the current feeling is that addressing occupational stress is a dual responsibility of the individual and the organisation as the organisation determines the work environment.

A Model for Occupational Well-Being, Mental Health Promotion and Distress Prevention

Quick, Murphy, Hurrell, and Orman (1992), present a framework of prevention for enhancing occupational mental health, psychological well-being, and stress management. Their framework provides a useful foundation by contributing to the understanding of the workplace dynamics associated with mental health in this environment. Their model has provided an essential element to the present research by contributing to the focus of the research questions and in the guidance of the development of the research measures. This model constitutes the main framework around which the remainder of the literature review related to the issue of mental health in the workplace is organised.

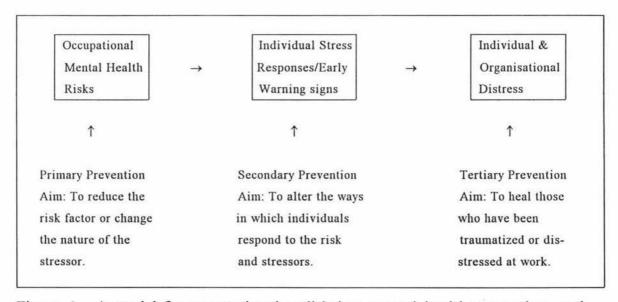


Figure 1. A model for occupational well-being, mental health promotion, and distress prevention (Quick et al., 1992, p. 10)

As shown in Figure 1, the first key element in this framework is occupational mental health risks which Quick et al. (1992) describe as "work demands and stressors that place the person at risk psychologically" (p.9). The factors that are characteristic to this risk category are outlined in the section of this chapter which provides a definition of various stressors (work and nonwork) and their impact on mental health. Exposure to these stressors does not

necessarily imply the development of mental health disorders, however increased psychological vulnerability follows the exposure of certain risk factors.

The second key element to the model acknowledges those individuals who develop early warning signs of distress resulting from exposure to the occupational mental health risks, personal vulnerabilities, and/or personality predisposition's. The third element in the model acknowledges that "early stages of psychological stress may turn into full-blown traumatic crises for specific individuals or groups" (Quick et al., p.10). It is at this stage it is argued, that both individuals and organisations bare the cost of advanced stages of distress. These two elements are further elaborated upon in the sections of this chapter which provide discussions on the individual and organisational outcomes associated with poor mental health in the workplace.

Quick and his colleagues (1992) argue that prevention rests on the integration of primary, secondary and tertiary interventions and regard primary prevention as being the preferred point of action. Although the acknowledgement that the availability of secondary and tertiary prevention is important, it is argued that the elimination of the mental health risks minimises the need for such interventions.

Embedded within this model is the recognition that primary prevention efforts such as work or task redesign or organisational restructuring can indeed constitute a source of stress for employees. Quick and his colleagues (1992) acknowledge however that in these circumstances, secondary prevention plays a vital role by aiding in individual adjustment to the stress associated with primary prevention. According to Quick et al., tertiary prevention should be regarded as a 'last resort' in terms of the actions taken towards the prevention of distress in the workplace. However, such prevention is necessary due to the fact that "even in circumstances in which the adverse effects of occupational mental health risks are minimised and individual's awareness levels as well as strengths are enhanced, unanticipated crises occur or peculiar individual vulnerabilities are exploited by environmental events" (Quick et al., p.10).

In practice, tertiary prevention programmes are the most common level of prevention, followed by secondary prevention interventions (Quick et al., 1992). Definitions of primary, secondary and tertiary levels of prevention and the associated strategies of each respective prevention level are outlined in the

section of this chapter concerning work-based intervention strategies.

Subsequent sections include a discussion into the efficacy of primary, secondary and tertiary interventions and address the issue of organisational level interventions versus individual level interventions.

Occupational Stressors: Definitions and Impact on Mental Health

A number of frameworks have been developed by various authors to aid in the understanding of occupational stress and associated outcomes. These frameworks are characterised by considerable overlap concerning the identification of categories of work stressors as well as the stressors included in each category. For example, Ivancevich and his colleagues (1990) divide stressors into four categories: the physical environment; the individual level, encompassing work role factors and career development; the group level, addressing relationships at work; and the organisational level, characterised by an exploration into organisational structure and climate, job design and task Similarly, in an attempt to organise the research literature characteristics. exploring occupational stress and its outcomes, Cooper and Marshall (1976) devised a stressor-strain model of the role of occupational factors in psychological and physical disease. This model, reflected in Cooper's revised publications (1983; 1986) acknowledges the interrelationship between work and non-work stressors and is useful as a framework which successfully outlines the critical factors which may play a role in the development of poor occupational health (Fletcher, 1994).

The frameworks devised by Ivancevich et al. (1990) and Cooper (1983) are consistent with person-environment fit theories in that each model encompasses potential sources of stress in the workplace as well as factors concerning individual differences. According to Cooper (1983), "Most research indicates that depending on the particular job and organisation, one or some combination of the sources of stress ..., together with certain personality traits, may be predictive of a variety of stress manifestations, such as coronary heart disease, mental ill health, job dissatisfaction, marital disharmony, excessive alcoholic intake or other drug taking, etc." (p. 369).

The consequences of stressors can be divided into three categories: psychological, physical or physiological and behavioural (Beehr, 1995). The present discussion, however, will focus on the psychological consequences and in certain instances, the behavioural outcomes of various stressors. The six major sources of stress outlined in Figure 2, illustrating Cooper's model (1983), will form the framework from which occupational mental health risks will be discussed. The sources of stress have been divided into two categories: work mental health risks which correspond with the first five sources of stress identified by Cooper (1983), and non-work mental health risks which incorporates the final source of stress outlined in Figure 2.

Sources of Stress	Symptoms of Stress		Disease
Intrinsic to	*	-	
the job	Individual symptoms	\rightarrow	Coronary heart disease
Role in the	Raised blood pressure		Mental illness
organisation	Depressed mood		
	Excessive drinking		
Relationships	Irritability		
at work	Chest pains		
→ Individual →		-	
Career	Organisational		Prolonged strikes
development	symptoms	\rightarrow	
	-		Frequent & severe
Organisational	High absenteeism		accidents
structure and	High labour turnover		
climate	Industrial relations		Apathy
	difficulties		
Home:Work	Poor quality control		
interface			

Figure 2. A model of the sources of stress (Cooper, 1983, p.370)

Work Mental Health Risks

The importance of identifying workplace stressors is underscored by the notion that "The success of any intervention effort to reduce work stressors and heighten individual satisfaction and well-being will depend on accurate diagnosis since different work stressors require different actions" (Burke, 1994, p.77).

Studies have shown that both physical and psychosocial job characteristics play a role in the etiology of work related psychological disturbances (Sauter et al., 1990). Physical work factors include "neurotoxic agents and physical and ergonomic characteristics of the task and workplace" (Sauter et al., 1990, p.1150). Psychosocial factors refer to "...the social environment at work, organisational aspects of the job, and the content and certain operational aspects of the tasks performed" (Sauter et al., 1990, p.1150). Unlike exposure to physical working conditions which may pose a threat to psychological well-being, the potential exposure to psychosocial factors is pervasive and many of these factors have been identified as being potentially harmful to individual well-being (Sauter et al., 1990).

The many psychosocial factors and physical work environment characteristics do not operate in isolation, but form part of a process of complex interactions with other factors (Cooper, 1983; Levi, 1994; Sauter et al., 1990). The complex interplay of these factors has impeded a thorough understanding of the relative influence of the different classes of factors on individual well-being (Sauter et al., 1990). Despite this minimised understanding, the factors identified in Coopers' model (1983) that are firmly established in terms of the quantity and convergence of research literature concerning the nature of stress and its psychological outcomes in the workplace will now be reviewed.

Factors Intrinsic to the Job

Physical working conditions. According to Cooper (1983; 1986), poor physical working conditions can exacerbate stress in the work environment. Various research studies have been conducted that support an association between characteristics of the physical environment and physical outcomes as well as distress and anxiety (see Loscocco & Spitze, 1990). The most frequently

mentioned work environmental stressors include high noise levels (e.g. Loewen and Suedfeld, 1992); illumination (e.g. Hedge, Sims, & Becker, 1995); the introduction of computer video terminals (e.g. Lie & Watten, 1994); temperature extremes (e.g. Cohen, 1980); ergonomic characteristics of the workplace and neurotoxic agents (Sauter et al., 1990).

Shiftwork. Work performed outside the daylight work hours from Monday through Friday, or beyond the eight hour shift is considered shiftwork (Kinicki, McKee, & Wade, 1996). Shiftwork has been related to many kinds of behavioural and psychological problems (Beehr, 1995). The costs involved in adapting to shiftwork schedules has generated a significant amount of research, some of which focuses on employee performance and satisfaction (e.g. Barton & Folkard, 1993), mood and psychological well-being (e.g. Healy, Minors, & Waterhouse, 1993), coping strategies (e.g. Spelten, Smith, Totterdell, Barton, & Folkard, 1993), individual differences (e.g. Harma, 1993) and intolerance to shiftwork (e.g. Kaliterna, Vidacek, Radosevic-Vidacek, & Prizmic, 1993).

Work overload. Work overload has been defined as being either quantitative, that is having too much to do or qualitative, that is being too difficult (see French & Caplan, 1972). Time-saving technology has been argued to increase workload and place individuals at risk psychologically as a result of increased cognitive demands (Bateman, 1996). According to Cooper (1983) research has revealed that job overload is associated with stress-related symptoms such as low self-esteem, low work motivation and escapist drinking (see Margolis, Kroes, & Quinn, 1974).

Work underload and lack of task variety. Jobs that are characterised by work underload are monotonous, restricted in terms of content, lack variety and demand relatively little creativity, decision making and social interaction (Gardell, 1987). According Melamed, Ben Avi, Luz, and Green (1995) repetitive work and work underload pose different work stressors, despite the fact that they are often studied together. Although studies on the impact of work underload on well-being are scarce, the negative impact of monotonous work on well-being has been well documented. Of interest here is the finding

that monotonous jobs have been associated with decreased job satisfaction and increased psychological distress (Melamed et al., 1995).

Physical work danger. There are certain occupations which have been identified as representing high risk occupations for potential danger (Cooper, 1983). These occupations include police, mine workers, soldiers and firemen. However, Cooper (1983) argues that the stress induced by the uncertainty of physical danger is often substantially relieved if an individual perceives that he/she has adequate training to cope with emergency situations.

P-E fit and job satisfaction. The person-environment (P-E) fit approach to stress characterises stress as "a lack of correspondence between characteristics of the person (e.g. abilities, values) and the environment (e.g. demands, supplies)" (Edwards & Cooper, 1990, p.293). This lack of correspondence or misfit, is hypothesised to generate strain and can result in psychological disturbances such as anxiety, depression and job dissatisfaction (Cooper, 1983; Edwards & Cooper, 1990) as well as behavioural disturbances (Edwards & Cooper, 1990).

Of central importance to the notion of P-E fit is the individual's perception of the fit between the demands of the job and the individual's ability to meet these job demands (Van Harrison, Moss, Dielman, Horvath, & Harlan, 1987). Additionally, the fit between the goals and motives of the individuals and the rewards the job offers to meet these goals are important in understanding the factors that may contribute to P-E incongruence (Van Harrison et al.). According to Sperry (1991) higher productivity and job satisfaction as well as decreased levels of stress are illustrative of P-E congruence. Job satisfaction is one of the more frequently studied aspects of job-related affective well-being and has been found to be consistently correlated with measures of mental health (Kelloway & Barling, 1991).

<u>Technological change at work.</u> Various aspects of strain due to new technologies such as visual display units, software and job content have been explored by various research studies (e.g. Korunka, Weiss, & Karetta, 1993).

The increasing use of computers in the workplace has contributed to a number of changes for certain jobs as well as the way in which work is organised and integrated within the social structure of an organisation (Briner & Hockey, 1994). Such changes are stressful in themselves (Briner & Hockey) and the components of computer technology are reported to exert both direct and indirect effects on short and long-term occupational health outcomes (Kinicki, McKee, & Wade, 1996). Briner and Hockey (1994) argue that the change in many organisations to new technology may be particularly stressful due to the fact that it is new and relatively unknown to many potential users. The increased use of computer technology highlights the challenge faced by employees to lessen the gap between the new skills demanded by employers and the actual skills they possess (Keita & Hurrell, 1994).

Additionally, Briner and Hockey (1994) have identified a number of authors who have commented that the introduction of computer technology in the workplace can reduce social contact between employees and cause social isolation. Such isolation may place certain individuals at risk psychologically.

Role in the Organisation

Organisational conflict. When the needs of employees and the needs of management are incompatible, conflicts between staff and employers or between different staff groups may arise (Mickleburgh, 1986). According to Cooper (1983) such conflict may be a source of occupational stress.

Role conflict and role ambiguity. Role conflict may be defined as "the existence of two or more sets of demands or expectations on... [a] person such that compliance with one would make it more difficult or impossible to comply with the other(s)" (Beehr, 1995, p.69). Role ambiguity is "... a direct discrepancy between the information available to the [a] person and that which is required for adequate performance of his [or her] role" (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). It has been argued that role conflict and role ambiguity are conceptually distinct job characteristics (Beehr, 1995), however a number of authors have studied and discussed these job characteristics as if they were one construct.

Significant amounts of research have demonstrated the relationships between role ambiguity and high levels of job dissatisfaction and psychological strain (e.g. O'Driscoll & Beehr, 1994; Schaubroek, Cotton, & Jennings, 1989). Role ambiguity has also been argued to be a major source of frustration and anxiety (Kahn et al., 1964).

Psychological outcomes such as tension, anxiety and frustration have long been associated with role conflict (Kahn et al., 1964). Incongruent role expectations within a work role are assumed to be psychologically uncomfortable and induce negative emotional reactions as a result of perceived ineffectiveness on the job (Schaubroek et al., 1989). Jackson and Schuler (1985) conducted a meta-analysis of the literature concerning role conflict and role ambiguity and found significant negative correlations between role conflict and/or ambiguity and participation, job satisfaction, commitment and involvement.

Job demands and control. Job demands involve intrinsic task requirements, the level of uncertainty, time pressure, and the rate, amount and difficulty of work (Karasek & Theorell, 1990). Control refers to the way in which individual resources such as skills, coping and appraisal are available to meet job demands (Briner & Hockey, 1994). Job demands and worker control interact to affect employee stress. More specifically, work characterised by having high job demands and low control is hypothesised to create strain (Karasek & Theorell, 1990).

Research has shown that lack of control over the means, manner and method of work influences both the physical and mental well-being of employees (Shain, 1996). Various studies have found that high job demands are associated with increased job tension/stress (e.g. Remondet & Hansson, 1991); anxiety (e.g. Landsbergis, Schnall, Deitz, Friedman, & Pickering, 1992); psychological demands (e.g. Dwyer & Ganster, 1991) and mental ill-health (e.g. Cooper & Kelly, 1993). Job demands have also been associated with alcohol and drug consumption (e.g. Zeier, 1994) and components of burnout (e.g. Melamed et al., 1995).

Autonomy. "It is assumed that working conditions that severely circumscribe autonomy and the use of creative skills come into conflict with

basic human needs related to controllability, stimulus variation, and self-expression, and are thus detrimental..." (Gardell, 1982, p.33). On reviewing the literature pertaining to job content and job satisfaction, Gardell makes the conclusion that mental strain among other outcomes are more widespread and intense among employees whose jobs are characterised as lacking autonomy, variety, skill and social interaction.

Career Development

The literature concerning the category of career development as an occupational stressor has been organised in terms of the stressors associated with different stages of career development. These stages typically include: starting a career; developing a career; maintaining a career; ending a career and career transitions (Burke, 1994). Stressors corresponding with these various stages of career development have been related to psychological outcomes such as anxiety and depression (see Burke for an overview of each stage). Cooper (1983) has found that the stressors associated with career development constitute a fundamental stressor at work and includes the impact of overpromotion, underpromotion, status incongruence, lack of job security and thwarted ambitions.

Lack of pay advancement prospects have also been studied as potential career development stressors. It has been argued that when valued job rewards (either intrinsic or extrinsic) are lacking, employees are affected adversely (Loscocco & Spitze, 1990). In view of the economic function of work, income and other extrinsic rewards have been shown to promote feelings of happiness and protect against distress (see Adelmann, 1987).

A significant amount of interest has been shown in the concept of job insecurity, which may be defined as "... perceived powerlessness to maintain desired continuity in a threatened job situation" (Greenhalgh & Rosenblatt, 1984, p.438). It has been argued that job insecurity and career development have increasingly become a source of psychological distress in work environments characterised by mergers, downsizing and restructuring (Cartwright & Cooper, 1992). What the individual perceives as a potential loss of continuity in a job situation may range from permanent loss of the job itself to

the loss of a subjectively important component of a job (Greenhalgh & Rosenblatt, 1984). According to Burke (1994), research has shown that changes in individual expectations of previously guaranteed employment has a marked psychological impact on those affected. Research indicates that the psychological effects of job insecurity appear to be similar to actual job loss (Burke), which include increases in depression, anxiety, poorer emotional health and social functioning (see Leena & Ivancevich, 1987).

Relationships at Work

Poor interpersonal relations at work have been related to job stress (e.g. Cooper, 1983; Burke, 1994) and it has been argued that poor relationships with members of an organisation may produce psychological strain (see French & Caplan, 1972). Research studies concerning psychological burnout contend that social interactions in the workplace are critical stressors (e.g. Leiter & Maslach, 1988). Leiter and Maslach conducted a study on the impact of the interpersonal work environment on burnout and organisational commitment among a sample of nurses. They found that interactions with co-workers were cited more often as sources of stress than interactions with patients.

Social support from members of an organisation is also included under Cooper's category of relationships at work (1983). Social support may be defined as "... resources (actual or perceived by a ... person) available from one or more others to assist the... person in the management of stress experiences and to increase the experience of well-being" (McIntosh, 1991, p.202). It has been hypothesised that social support has a buffering, or moderating effect on the impact of stressors and manifestations of stress (Ganster, Fusilier, & Mayes, 1986). According to Cohen and Wills (1985) several studies using mental health outcome measures have demonstrated a relationship between social support and mental health. For example, in a study of organisational characteristics, perceived work stress and depression in emergency medicine residents, Revicki, Whitley, and Gallery (1993) indicated that peer and co-worker support had a strong positive impact on residents' perceptions of work-related stress, depression and work satisfaction.

Although the mechanisms through which social support are related to mental health outcomes requires clarification, it is assumed that a lack of positive social relationships may lead to psychological consequences such as anxiety or depression (Cohen & Wills, 1985).

Organisational Structure and Climate

As a category of occupational stressors, organisational structure and climate refers to job stressors at the macro organisational level (Beehr, 1995) and are frequently the outcome of organisational culture and management style (Cooper & Cartwright, 1994). Such stressors include office politics, lack of participation in the decision making process, lack of feedback and recognition (Cooper, 1983) as well as organisational change and restructuring and unclear organisational structure.

Gavin (1975) looked at the relationships between employee perceptions of the work environment and measures of employee mental health. It was found that a clearly structured environment, minimal hinderance, equitable reward systems and trusting and supportive supervisors were more positively related to employee mental health. Greater participation has also been associated with lower levels of mental illness and behavioural outcomes (see French & Caplan, 1972; Gardell, 1987; Karasek & Theorell, 1990).

Contemporary research has also explored the impact of organisational change and restructuring, and includes studies concerning mergers and acquisitions and organisational retrenchment and decline (see Burke, 1994). New Zealand has not escaped the downsizing phenomenon (see Prime Ministerial Task Force on Employment Report, 1994) and organisational restructuring often results as organisations have increasingly found themselves involved in mergers, acquisitions and joint ventures or have felt the pressure to conduct downsizing activities (Cooper & Cartwright, 1994). These forms of organisational change often create ambiguous working environments and individual cultural incongruence (Cooper & Cartwright) and have been found to increase perceived levels of stress and uncertainty and evoke apprehension and anxiety (Jick, 1983).

Research has recently paid attention to the effects of organisational restructuring and change upon the 'survivors', or in other words, those who

remain within an organisation following change efforts (see Kets de Vries & Balzas, 1997). Work carried out by Brockner, Davy, and Carter (1985) cites anecdotal evidence suggesting that layoffs may engender job insecurity in survivors, which is manifested in psychological consequences such as anxiety. According to Armstrong-Stassen (1994), many survivors react negatively to workforce reductions and express their reaction through a variety of psychological distress mechanisms such as anxiety and depression.

Non-Work Mental Health Risks

Literature concerning influences outside the workplace or non-work stressors and their impact has largely centred around the family due to the fact that the family is perceived to be the most important aspect of a person's life and has a significant impact on general life satisfaction (Gutek, Repetti, & Silver, 1994). The way in which experiences from work are conveyed in the family as well as the way in which experiences in the family are expressed at work has received much attention in the occupational stress literature (e.g. Klitzman, House, Israel, & Mero, 1990). Research has examined the unique influence of family stressors, and work-family conflict with regard to psychological stress (e.g. Frone, Russell, and Cooper, 1994). Despite the fact that the results of such research are not consistent, they suggest that tensions between family and work roles and each work:non-work stressor has important implications for psychological well-being (e.g. Frone et al., 1994; Thomas & Ganster, 1995).

The effect of work pressures on the families of employed individuals has received much attention (Cooper, 1983). Cooper argues that under normal circumstances, most individuals perceive the home environment as a refuge from the demanding work environment. However, when there is a career crisis or the individual is exposed to work stressors with which he/she is unable to cope, the tensions and consequences of such stressors are brought into the home environment. Members of the home environment may be affected from this process of bringing work stress into the home (see MacEwen & Barling, 1994; Pahl & Pahl, 1971).

Researchers have realised that individuals do not work in a vacuum, but rather behaviour on the job is often influenced by experiences in other areas of life (Gutek et al., 1994). Two types of connections between an employed individual's life at work and life outside work include: role processes and spillover processes (Gutek et al.). Role processes refer to the distribution of an individual's time, energy and opportunities between social roles (Gutek et al.). Interrole conflict, or situations where the behaviours required to enact family and occupational roles are incompatible and role overload, or an overburden by the combination of demands have been related to various behavioural and psychological outcomes (see Gutek et al., 1994; Thomas & Ganster, 1995).

According to Gutek et al. (1994) the development of interest in non-work factors and role processes that affect work has coincided with an increase in research on working women and dual career stress (e.g. Duxbury & Higgins, 1994). An increasing trend is the participation of women in full-time careers (Cooper, 1983). This increase in participation has been demonstrated to affect both men and women of the workforce (see Cooper, 1983; McBride, 1988; Kandel, Davies, & Raveis, 1985; Piotrkowski & Repetti, 1984; Warr & Parry, 1982).

Spillover processes may be described as "... the effects that family events can have on job adjustment due to a change in the employed person's emotional well-being" (Gutek et al., 1994, p.143.). Therefore it is argued that an affective state generated in one setting spills over into another setting (Gutek et al., 1994). Positive spillover occurs when an individual feels supported by the relationships in the home (Crouter, 1984). It is hypothesised that the psychological outcomes associated with the stressors of family problems, financial problems, divorce, immigration and bereavement may constitute negative spillover. Psychological outcomes engendered at home may be expressed at work in terms of an individual's motivation, job performance and interpersonal relations (Gutek et al., 1994).

Categorisation of Mental Health Outcomes in the Workplace

The expression of 'psychological disorders' connotes a classification of problems incorporating a wide array of social, behavioural and biomedical conditions with diverse and often unknown etiologies (Sauter et al., 1990). The rationale for the present categorisation of mental health outcomes in the

workplace is closely aligned with the definition of occupational mental health. This definition focuses on individual psychological outcomes in the occupational health arena that are amenable to workplace interventions regardless of a clear occupational basis (Sauter et al.). These psychological outcomes do not necessarily represent conditions that are always identifiable under recognised systems of medical classification such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) of the American Psychiatric Association (1994). Individual psychological outcomes may however, represent significant functional disturbances and may constitute risks for the development of clinical disorders (Sauter et al., 1990).

The broad categorisation of mental health outcomes presented here is confined to individual outcomes in the psychological-behavioural domain and includes the following conditions: psychological/emotional issues; alcohol abuse and chemical dependency.

Psychological/Emotional Issues

Psychological strains as they are presented here often intercorrelate fairly strongly with each other. For example, depression often has a major empirical overlap with anxiety (e.g. Milligan & Clare, 1994).

Anxiety

Anxiety is part of everyday life and in many situations it can be functional (Bootzin, Acocella, & Alloy, 1993). However, anxiety ceases to be an adaptive response when it becomes a source of extreme distress (Bootzin et al.). Anxiety is not a unidimensional phenomenon that can be described accurately and universally by a single model or definition (Lowman, 1995). It is often difficult to draw a line between 'normal' and clinical anxiety. "The definition of clinical anxiety is an operational one, determined mostly by how the anxiety affects the individual. If the individual is impaired by the anxiety, ... or engages in self-destructive behaviours to control it, the anxiety should be considered clinical" (Taylor & Arnow, 1988, p. 3). The position that is presented here centres around the argument that a number of different types of anxiety syndromes may

be identified in the workplace, however, these syndromes may not necessarily be considered disorders. Disorders is a term reserved for syndromes meeting the criteria established by the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (Taylor & Arnow, 1988).

Anxiety results from heightened autonomic and cognitive responses to real or imagined threats (Baun, Bernacki, & Herd, 1987). Anxiety may occur as an immediate response to some perceived threat and some individuals may experience anxiety over long periods of time (Baun et al.). Symptoms associated with the cognitive dimension of anxiety may include sensory perceptual symptoms such as feelings of unreality and hypervigilance, conceptual symptoms such as the inability to recall important things, confusion and difficulty in concentration and reasoning. Conceptual symptoms include cognitive distortion, fear of losing control and not being able to cope, as well as fear of negative evaluations (Taylor & Arnow, 1988). Symptoms associated with the somatic and affective dimensions of anxiety may include sweating, trembling, flight, avoidance, anger, irritability, and submission (Taylor & Arnow).

Depression

Depression is considered to be mainly a disorder of mood or effect (Gotlib & Hammen, 1992). In contrast to the normal and transitory experiences of mood which is argued to be a healthy and adaptive response, the syndrome of depression is defined as depressed mood along with a set of additional symptoms persisting over a period of time, and causing disruption and impairment of functioning (Gotlib & Hammen). Depression is seldom traceable to a single cause and often results from the interaction of biological predisposition, a psychological tendency towards pessimism, feelings of low self-esteem and trauma or long-term stress (Turner, 1995).

Psychological features associated with depression include: depressed mood; feelings of worthlessness and guilt; difficulties in thinking (Bootzin et al., 1993); marked loss of self-esteem; sad, regretful thoughts and impaired memory for recent events (Milligan & Clare, 1994). Physical features associated with depression include: psychomotor retardation or agitation (Bootzin et al., 1993); heightened intolerance and flattened expression (Milligan & Clarke, 1994).

Signs of depression in the workplace include: decreased productivity; morale problems; lack of co-operation; accidents; absenteeism; frequent statements about being tired all the time; complaints of unexplained aches and pains and alcohol and drug abuse (Vennochi, 1995).

Burnout

According to Kandolin (1993) burnout is most commonly defined as an extreme condition of psychological fatigue. Burnout is a symptom of emotional exhaustion and has been found to be common in those individuals involved in emotionally demanding people-centred work (Kandolin). In contrast to being an immediate response to a crisis, burnout is usually a response to long-term stress where symptoms may be both physiological and psychological in nature (Papalia & Olds, 1992). Emotional exhaustion, depersonalisation and feelings of low personal accomplishment constitute the three major components of burnout (Maslach & Jackson, 1984). As one of the more extreme varieties of work-related strain, emotional exhaustion manifests itself in individuals as a general loss of feeling, concern, trust, interest and spirit (Maslach & Jackson). The physiological dimension of burnout is characterised by low energy levels, chronic fatigue and weakness (Reichel & Neumann, 1993).

Alcohol Abuse and Chemical Dependency

Alcoholism may be defined as a condition with genetic, psychological and environmental factors influencing its development and manifestations. Alcoholism is characterised by continuous or periodic impaired control over drinking, preoccupation with alcohol, use of alcohol despite adverse consequences and distortions of thinking, most notably denial (American National Council on Alcoholism and Drug Dependence, 1990 cited in Scanlon, 1991). Loss of control is the characteristic that separates the alcoholic from the non-alcoholic (Scanlon, 1991).

Alcohol abuse typically identifies itself in the workplace in specific ways by one or more of the following: frequent absences; time distortion; frequently missed appointments; repetitive forgetfulness; frequent accidents; injuries; loss of motivation or interest towards ones job; deterioration of work performance; personality changes and frequent illness (Banta & Tennant, 1989).

Drug dependence defies a single definition due to the multiplicity of drugs having different effects (Scanlon, 1991). Scanlon, however provides a general definition of addiction which refers to "a style of living that includes drug dependence, generally both physical and psychologic, but mainly connotes continuing compulsive use and overwhelming involvement in a drug" (p. 8). Some of the psychological and physiological consequences of drug dependency include: preoccupation with the drug; unintentional overuse; development of increased tolerance to a drug; persistent desire or efforts to control drug use (often accompanied by relapses); a pattern of drug-impaired performance in social or occupational circumstances; the abandonment of important social, occupational, or recreational activities for the sake of drug use and continued drug use despite serious drug-related problems (Bootzin et al., 1993).

Maladaptive drug use that has not progressed to the stage of full-blown dependence is characterised by the persistent use of a substance despite social, occupational, psychological, or physiological problems as well as the continued use of a substance in physically dangerous situations (Bootzin et al., 1993).

The Impact of Poor Mental Health on Individual Outcomes

One of the necessary parts of the categorisation of mental health outcomes in the workplace consists of aversive outcomes to the individual. Research incorporating individual and organisational outcome measures has indicated a clear bias in favour of outcomes that focus on the individual. For example in the DeFrank and Cooper (1987) review of stress management interventions, the categorisation of the measures used in a number of studies indicated that 15 of these measures focused on the individual and only two on the organisation.

Psychological outcomes can significantly impair an individual's capacity to work regardless of whether such conditions were caused by characteristics of the individual or by the interaction between personal characteristics and working conditions (Lowman, 1993). Psychological characteristics of an individual become crucial when they have a demonstrated impairment on the work function

or interact with aspects of the work or work setting to create personal difficulties (Lowman, 1993). Many of the individual outcomes associated with poor mental health have been previously highlighted in this chapter under the signs and symptoms of the various categorised mental health outcomes. The present section therefore includes a brief discussion on the relationships between the individual mental health outcomes previously categorised and their respective impact upon individual outcomes in terms of work functioning.

Psychological/Emotional Issues

"The disruption of functioning in major roles has long been recognised as a hallmark of depression" (Martin, Blum, Beach, & Roman, 1996, p.3). Impaired functioning in occupational roles has been shown to range from moderate to severe among depressed individuals (see Mintz, Mintz, Arruda, & Hwang, 1992). In a study on subclinical depression and performance at work, Martin and his colleagues (1996) found that depressive symptomology had important independent negative effects on job performance. According to the study, mildly depressed individuals performed more poorly in a number of work roles in comparison to individuals who were less depressed (Martin et al.).

Both anxiety and depression have been associated with individual behavioural outcomes of decreased activity, lowered initiation of responses, decreased energy, behavioural disorganisation and performance deficits, increased dependency and poor social skills (see Papalia & Olds, 1992). Depression has also been associated with physical poor health, as disturbances of appetite commonly accompany depressive episodes (Bootzin et al., 1993).

Burnout has been related to individual outcomes such as job dissatisfaction and decreases in the quality of job performance (see Reichel & Neumann, 1993).

Alcohol Abuse and Chemical Dependency

Estimates have been provided on the loss of individual productivity from alcohol and drug abuse (see Miller & Kelman, 1992). Alcohol abuse has been related to decreases in efficiency, productivity, deterioration of work

performance and loss of work commitment (Banta & Tennant, 1989). Loss of mental acuteness, memory and judgement and diminished concentration are individual outcomes often associated with alcohol abuse (Bootzin et al., 1993). Alcohol abuse has serious physiological consequences that can impact severely on an individuals' physical health. Examples of such consequences include: stomach ulcers, malnutrition, cirrhosis of the liver, hypertension, heart failure, cancer and brain damage (Bootzin et al., 1993).

The Impact of Poor Mental Health on Organisational Outcomes

Outcomes of individuals' poor mental health to the organisation could be either negative or positive (Beehr, 1995) however, the literature has often assumed or noted that psychological and behavioural problems in the workplace contribute negatively to various organisational outcomes (e.g. Bromet & Parkinson, 1989). By definition, organisational outcomes are those outcomes that have a more direct impact on the organisation than on the individual (Beehr, 1995). The adverse effects of poor mental health and occupational stress for individuals and organisations are reflected in both direct and indirect costs. These direct and indirect costs have previously been discussed in this chapter, therefore a summary of the impact of poor mental health on organisational outcomes in terms of costs to the organisation is presented here.

Psychological/Emotional Issues

Greenberg et al. (1995) have suggested that each year the indirect costs of depression symptoms translates into an average performance reduction during the working year of 20%, resulting in costs of US\$12.1 billion due to worker impairment and approximately US\$11.7 billion in costs from absenteeism associated with depressive episodes. Lost productivity and decreased efficiency have been associated with poor mental health in the workplace (Martino, 1992).

Burnout has been related to organisational outcomes such as absenteeism, turnover and decreases in the quality of job performance (see Reichel & Neumann, 1993). When taken from an organisational perspective, the organisational level outcomes of burnout are costly from the negative attitudinal

aspects and the behavioural aspects of job performance and eventual turnover. These negative outcomes are exacerbated when combined with stress and its correlates (Reichel & Neumann).

Alcohol Abuse and Chemical Dependency

A number of studies have examined the relationship between drug and alcohol abuse and organisational outcomes such as turnover and accidents (see Harris & Trusty, 1997). Although many of these studies demonstrated statistical relationships between alcohol abuse, chemical dependency and various organisational outcomes, the magnitude of the relationships were relatively small (Harris & Trusty).

Research surrounding the socio-economic variables, drinking behaviour, and the likelihood of injury-related work absences has indicated that problem drinkers in comparison to nonproblem drinkers are 2.7 times more likely to have an injury-related absence (see Yandrick, 1996). The International Labour Organisation and World Health Organisation have reported that of all work fatalities, 15-30% are alcohol or drug related and that employees with alcohol and drug problems have 200-300% greater absenteeism than others (see Tollestrup, 1994a). Substance abuse research studies generally agree that employees involved in substance abuse characteristically have twice as many absences, use double the amount of sick days and benefits and work at approximately 75% of their capability (National Institute on Drug Abuse cited in Banta & Tennant, 1989).

Work-Based Intervention Strategies Addressing Occupational Mental Health Issues

Quick et al. (1992) present a framework of prevention for enhancing occupational mental health, psychological well-being and stress management which has been previously discussed in this chapter. Within this framework, Quick and his colleagues identify three levels of workplace prevention: Primary, Secondary and Tertiary. The definitions of the primary, secondary and tertiary interventions outlined in this framework represent definitions that have been

well-accepted and utilised in the occupational health literature (e.g. Kahn, 1987; Sperry, 1991; Vicary, 1994). These definitions are additionally closely aligned with literary discussions of individual and organisational level interventions (e.g. Burke, 1993; DeFrank & Cooper, 1987; Gardell, 1982; Ivancevich et al., 1990).

The definitions of primary, secondary and tertiary prevention levels and associated interventions form the body of the following discussion concerning work-based interventions addressing occupational mental health issues.

Primary Prevention

Primary prevention concerns interventions that are aimed at eliminating, reducing or altering occupational stressors (Quick et al., 1992). The basic notion in primary prevention is exemplified in the ancient proverb: "An ounce of prevention is worth a pound of cure" (Quick et al.). According to APA/NIOSH (1990), the first concern in advancing occupational mental health management in the workplace is to address the environmental and psychosocial aspects of the design of work. This means altering the psychosocial demands or stressors created by the worksite and incorporates organisation-directed primary intervention strategies to enhance the psychological health of employees.

Sauter and his colleagues (1990) provide positive principles to guide in the design of jobs in the interests of improving mental health. They make the point that although research has demonstrated these principles to be effective, "some work situations may not be readily amenable to the needed interventions. Furthermore, the underlying risk factors can be interrelated, and successful interventions require attention to more than one ... principle(s)" (Sauter et al., 1990, p. 1151). A discussion concerning these principles as well as the strategies aimed at controlling environmental and psychosocial occupational stressors is presented here.

Work load and work pace. Physical and mental demands in the workplace should be commensurate with individual capabilities and resources, avoiding both overload and underload (Sauter et al., 1990).

Work schedule. Work schedules should be compatible with non-work demands and responsibilities. Positive steps include trends towards flexitime, a compressed work week and job sharing (see Dessler, 1994). Schedules involving rotating shifts should include stable rates of rotation in a forward (day-to-night) direction (Sauter et al., 1990).

Work roles. Work roles and responsibilities should be well defined. Clear explanations should accompany job duties and job expectation conflicts should be avoided (Sauter et al., 1990). According to Cooper and Cartwright (1994), eliminating or reducing role related stress requires clear role definition and role negotiation.

Job future. Job security and opportunities for career development should not be surrounded by ambiguity. Uncertainty should be reduced for individuals with regard to work and the work environment (APA/NIOSH, 1992). Clear information needs to be given to employees regarding promotional opportunities and mechanisms for improving skills or professional growth within the organisation. Impending organisational developments that have the potential to affect individual's employment should also be well articulated (Sauter et al., 1990).

Social environment. Jobs should provide social interaction opportunities for the purposes of social support and for actual help required in accomplishing work tasks (Sauter et al., 1990). According to Pierre (1986) the opportunity for interaction can be a significant source of satisfaction in the workplace.

Content. Job design should incorporate the provision of meaningful, stimulating jobs, where individuals have the opportunity to utilise their skills. Increasing the scope of work or job rotation (see Dessler, 1994) are examples of attempts to improve narrow, fragmented work activities that are deficient in the criteria identified above (Sauter et al., 1990).

<u>Participation and control.</u> Individual employees should be given the opportunity to participate in the decision making process and actions that affect

their jobs and their job performance (Sauter et al., 1990) and increased control over work and the work environment (APA/NIOSH, 1992).

The nature of specific interventions across organisations is dependent on several factors including industry type and organisational level (Sauter et al., 1990) however, Elkin and Rosch (1990) provide a useful summary of a range of possible organisation-directed strategies aimed at reducing occupational stressors, many of which are aligned with the principles outlined by Sauter and his colleagues (1990). This summary includes the following primary interventions: task redesign; work environment redesign; establishment of flexible work schedules; encouragement of participative management; employee involvement in career development; analysis of work roles and the establishment of goals; provision of social support and feedback; building of cohesive teams; establishment of fair employment policies and the sharing of rewards.

Other strategies not provided in Elkin and Rosch's (1990) summary include the revision of selection and placement procedures to reduce the likelihood of negative stress through improving individual-organisational fit prior to an individual joining an organisation (Matteson, 1987). The process of recruitment and selection is argued to offer an early basis for maximising the attainment of positive organisational relationships (Matteson). Ergonomic solutions provided by the alteration of physical working conditions is a primary intervention that in turn, has implications for task or workplace redesign (Cooper & Cartwright, 1994).

Indirectly, many primary intervention strategies which focus on changing the style of work organisation often constitute vehicles for culture change, moving the organisation toward an 'employee empowered' culture (Cooper & Cartwright, 1994). However, primary prevention efforts at work that involve job redesign or modifications in organisational structure or function, can themselves constitute stressors for individuals in the workplace (Quick et al., 1992). Quick and his colleagues make the point that in organisational settings where primary prevention is pursued, secondary prevention plays a role in easing the stress effects of primary interventions. This point further reinforces their argument that prevention rests on a three-tiered approach incorporating primary, secondary and tertiary prevention.

Secondary Prevention

Secondary prevention incorporates approaches designed to teach individuals skills for managing unavoidable occupational stressors which aim to alter the ways in which individuals respond to occupational mental health risks (Quick et al., 1992).

Education forms a central component to many secondary intervention strategies and aims to inform individuals about health risks to avoid as well as to inform individuals of ways in which they may alter how they respond to occupational mental health risks (APA/NIOSH, 1992). The prevention of work-related psychological disorders ultimately depends on the knowledge and resources that enable individuals to recognise psychological dysfunction and the underlying risk factors and empower individuals to implement control measures (Sauter et al., 1990). APA/NIOSH (1992) have identified three essential content areas to be addressed through education and training in the workplace:

- Awareness and appreciation of psychological disorders as occupational health problems in the workplace and their relationship to organisationallevel outcomes.
- 2. Understanding of work (and non-work) risks and demands which adversely impact occupational mental health.
- Recognition of individual signs and organisational symptoms of mismanaged stress and impaired occupational mental health as early warnings of workplace problems.

(p.39).

The purpose of the educational component to work-based intervention strategies addressing occupational mental health issues is to "...shape occupational health psychology attitudes and behavior; overcome stereotypes and stigmas; and promote early recognition and response to budding mental health disorders" (APA/NIOSH, 1992, p.39). It has been argued that secondary interventions should include worker education concerning the indicators of psychological dysfunction and job factors that increase the risk for psychological dysfunction. Additionally, managers need to be educated in the mental health

consequences of poor job design and trained in the work-related causes of psychological disorders and the necessary control measures (Sauter et al., 1990). It has been further argued that it is particularly important that such education and training reach all levels of the organisation (Sauter et al.).

Education programmes on the following occupational mental health issues in the workplace represent examples of secondary interventions incorporating the education component previously discussed: anxiety; depression; alcohol abuse; chemical dependency and general mental well-being.

It has been argued that enhancing or augmenting the strengths of individuals mediates the experience of adverse consequences from occupational stressors (Burke, 1993). Research has indicated that some secondary-level interventions can make a difference in temporarily reducing adverse responses to perceived stressors (see Murphy, 1988). The following interventions represent secondary level strategies that focus on enhancing individual resilience to and competency in dealing with various occupational stressors: individual-level stress management interventions; relaxation techniques training; interpersonal skills training; problem solving training; exercise programmes and individual goal-setting.

Stress management interventions and their secondary prevention components have been well-documented (e.g. DeFrank & Cooper, 1987; Ivancevich et al., 1990; Murphy, Hurrell, & Quick, 1992). These components often focus on employees' cognitive appraisal of the situation and attempt to help employees cognitively redefine potentially stressful situations.

Exercise and recreational activities have been associated with psychological benefits and have been identified as coping strategies to deal directly with stress (see Baun et al., 1987). Exercise is argued to provide individuals with feelings of value or worth and has a positive impact upon individual levels of job satisfaction (Baun et al.). This, according to Baun and colleagues has been the main rationale for the establishment of corporate health and fitness programmes. In addition to the reported psychological benefits of exercise for healthy individuals, research indicates that exercise has therapeutic effects on individuals suffering from anxiety and depression (see Blumenthal, Williams, Needels, & Wallace, 1982).

Relaxation techniques training constitutes a secondary intervention that rests upon the notion that bodily tension is a factor in strain, that if combated or resisted enables the body to relax thereby reducing the effect of the strain (see Beehr, 1995 for a review of current relaxation intervention research).

As a secondary intervention, interpersonal skills training in the workplace encourages well-being by enabling individuals to interact in a less stress-provoking manner and by further enabling individuals to deal with stressful situations positively (Pierre, 1986). As a form of interpersonal skills training, problem solving training similarly enables individuals to redefine and cope more effectively with occupational stressors.

Goal setting, as a secondary intervention is based upon goal-setting theory, which falls within the domain of cognitive psychology (Berry & Houston, 1993). Motivation constitutes a central construct in the process of goal-setting where individuals are motivated to strive for and attain goals (Greenberg & Baron, 1995). It has been argued that assigned goals influence individual's perceptions of self-efficacy and competence (Greenberg & Baron). The identification of competence has been proposed to constitute one of the components to healthy mental functioning (see Warr, 1994).

Tertiary Prevention

Tertiary prevention concerns treatment activities aimed at treating those individuals in distress at work (Quick et al., 1992). Tertiary interventions in the organisational setting are not intended to deal with major mental health disorders, rather the targets include the range of occupational mental health issues amenable to workplace or outpatient intervention (APA/NIOSH, 1992). It has been argued that substance abuse disorders and depression are among the most prevalent forms of distress in the workplace for which individuals, require tertiary intervention in the form of treatment (APA/NIOSH).

Key components of tertiary interventions include: 1) the identification of high risk and symptomatic individuals; 2) appropriate referral and/or treatment of individuals; 3) symptom-directed treatment by appropriate professionals; 4) follow-up to assure treatment effectiveness; and 5) evaluation of health improvement and cost efficacy (APA/NIOSH, 1992; Pelletier & Lutz, 1988).

Employee Assistance Programmes (EAP's) represent a tertiary intervention that have their historical roots in the occupational drug and alcohol programmes that were instituted by employees over 40 years ago (Francek, 1987). The initial focus of EAP's on substance abuse has expanded and today, many EAP's are concerned with a much broader range of human problems such as family and marital issues, career problems, job stress, financial problems and a range of lifestyle problems as well as alcohol and drug abuse problems (Santa-Barbara, 1984). Many EAP's encourage employees to use the mental health resources provided by their service before a problem they are experiencing (resulting from work or non-work factors) becomes severe enough to disrupt their job performance (Santa-Barbara).

The functions of EAP's have been broken down into three general areas:

1) the identification of employees who need or warrant assistance; 2) the source of the EAP service; 3) and the types of services available to employees (Lee & Gray, 1994, p.219). Tollestrup (1994b) provides an excellent definition of a number of models of EAP's which include internal, external and integrative variations. The internal programme utilises in-house resources and represents a network of Human Resource staff within the organisation and may include welfare officers, occupational health nurses and EEO officers or labour representatives. Within internal EAP's, referral staff are appointed who provide basic assessment and offer referral guidance and options from both within and outside the organisation. These programmes have been argued to be cost-effective and representative of a 'participative' workplace culture on the one hand, but have also been criticised as most employees are sceptical of the services' confidentiality and are therefore reluctant to show what they consider to be a personal inadequacy or difficulty in managing part of their lives.

In comparison to internal EAP's, external EAP's contract an off-site support provider and represents an EAP model that "... is a growing trend both in New Zealand and overseas" (Tollestrup, 1994b, p.17). Characteristic of external EAP's is the availability of high professional competency and detachment, securing greater employee confidence regarding the confidentiality of the service. The critique of this model of EAP service is that the subtleties, culture, politics and history of an organisation are superficially addressed, which

are crucial in order to work effectively within the dynamic interaction of the individual and the organisation.

The integrative variation of EAP service model incorporates characteristics from both the internal and external models whereby external contractors provide competent support staff that work on-site at defined regular intervals alongside and in partnership with other organisational support personnel (Tollestrup, 1994b). This model of EAP service is argued to overcome the downfalls presented by the internal and external programmes respectively.

Studies which have examined in-house counseling as a tertiary intervention strategy have generally considered their contribution within internal EAP services (Cooper & Sadri, 1991). In-house counsellors may intervene in the following areas: in helping individuals to deal with particular personal or work-related problems and attempting to increase the employees' capacity to withstand perceived stressors (Cooper, Allison, Reynolds, & Sadri, 1992).

Cognitive counselling approaches similarly represent a tertiary intervention strategy that may be incorporated within EAP and in-house counseling services. Cognitive counselling approaches are based upon the philosophy underlying cognitive behavioural therapy which is grounded in a theory of psychopathology that recognises the reciprocal interrelationship among the cognitive, behavioural, somatic and emotional systems (Clarke & Beck, 1988). Cognitive counselling approaches include a series of strategies that relieve psychological dysfunction by correcting distorted and maladaptive thinking (see Freeman, Pretzer, Fleming, & Simon, 1990; Newman & Haaga, 1995).

A final key issue under the provision of tertiary intervention strategies concerns confidentiality, which is aptly underscored by the following quote: "Policies, procedures, and practices need to be implemented to insure confidentiality so that the system is viewed as trustworthy and so that active outreach efforts to draw those in need within the program will be understood as based on positive motives" (APA/NIOSH, 1992, p.40).

Evaluative research on the efficacy of primary, secondary and tertiary interventions is quite uneven (Murphy, 1988). Stress intervention studies have tended to focus on secondary and tertiary interventions that are aimed or focused on the individual whereas research concerning primary intervention and organisationally orientated interventions is limited (DeFrank & Cooper, 1987).

Primary Interventions

The fact that studies that evaluate organisational interventions designed to reduce employee stress are uncommon in the published literature, may be attributable to the enormous complexities and difficulties of conducting such research (Cooper & Payne, 1992). According to Murphy (1988), "Reducing stress through actions aimed at work environment stressors is the most straightforward organisational stress reduction intervention. They also can be costly and difficult to implement in organisations. Stressor reduction requires an identification of the stressors followed by planned changes in organisational structure and function" (p. 322). Assessing the costs and benefits of primary level interventions therefore represents a difficult problem which management must face. In many organisations however, reaching a solution to this problem is often hindered by the notion that the work environment does not contribute significantly to employee stress and that stress is a personal issue requiring individually orientated and initiated interventions (Murphy, 1988).

Despite the lack of volume with respect to research into organisational-level interventions, the efficacy of the reduction of role stress through organisational goal setting and increased participation in decision making has been indicated in various studies (see Burke, 1993). Similarly, studies addressing the effects of increased job autonomy and work schedule autonomy have indicated that these primary interventions are positively related to emotional well-being (see Burke, 1993). It appears apparent that primary interventions hold promise for reducing work stress based on the significant amount of published literature on the 'associations' of occupational stressors, organisational level intervention and employee well-being (e.g. Cooper &

Cartwright, 1994; Elkin & Rosch, 1990; Quick et al., 1992; Sauter et al., 1990). The rare literature on the efficacy of primary interventions have produced "consistent and proactive results" (Murphy, 1988), however additional research is required to provide further insight into the 'effects' of primary prevention interventions.

Secondary Interventions

Evidence as to the success of secondary intervention strategies has been argued to be generally confusing and imprecise (Elkin & Rosch, 1990). The overall field of health promotion programmes in the workplace has not been adequately evaluated by rigorous research design and appropriate data analysis (Pelletier & Lutz, 1988). There is substantial evidence that stress management programmes are effective in reducing stress in the short term (Cooper & Cartwright, 1994), and research has revealed findings that support the value of psychoeducational training programmes for preventative mental health in the workplace (e.g. Kagan, Kagan, & Watson, 1995). Few studies, however, have compared the effectiveness of different training techniques (Murphy, 1988).

It has been argued that secondary interventions do not have a lasting effect in that once individuals encounter occupational demands, the benefits of individual-level interventions disappear (Burke, 1993). According to Cooper and Cartwright (1994), awareness activities and skills training programmes play an important part in extending the individual's psychological resources, however they argue that the role of many secondary interventions is one of "damage limitation", often addressing the consequences of exposure to occupational stressors rather than the sources of occupational stress which may be embodied within the organisational culture and structure. Similarly, training individuals to cope with occupational stressors has been argued to be of limited value if implemented in isolation and not as part of an integrated occupational health strategy (Burke, 1993).

Tertiary Interventions

Despite their prevalence in organisational settings, EAP's are rarely evaluated using well-controlled, scientific methodologies (Murphy, 1988). Indicators of EAP programme success have included: 1) change in behaviour; 2) change in work performance; 3) change in cost reduction; and 4) change in awareness rates (Francek, 1987). Studies utilising these types of measures have shown EAP's to be effective in terms of the increase in employees utilising the service, the extent to which performance levels increase after employees have had contact with an EAP programme and the savings for the company (Murphy, 1988). According to Murphy, EAP's have the potential for reducing worker distress, however they would need to incorporate primary prevention components in order to realise this potential.

Counseling programmes have been found to correlate positively with improved mental health and self-esteem (see Cooper & Sadri, 1991) and data for the efficacy of cognitive counseling approaches and brief psychotherapy is quite well established (see Newman & Haaga, 1995). However, despite the fact that these strategies seem intuitively appealing, the question of whether or not such approaches are transferable to the workplace remains unanswered due to the lack of rigorous research into this area (Pelletier & Lutz, 1988).

Organisational versus Individual Level Interventions

In practice, tertiary interventions are far more commonly implemented in the workplace than primary prevention strategies, with secondary interventions intermediate in frequency (Murphy, 1988). This hardly seems surprising given the disproportionate focus on individual level interventions and outcomes in the existing research (Ivancevich et al., 1990). It has been suggested that the prevalence of secondary and tertiary interventions in the workplace is reflective of the perception that stress and other associated outcomes are individually related and therefore, the focus of intervention is on changing the individual rather than the work situation (Cooper & Cartwright, 1994).

Despite evidence that secondary and tertiary interventions may only be effective as short term strategies (e.g. Burke, 1993; Cooper & Cartwright,

1994), the prevalence of these interventions in the workplace may be attributable to the fact that treatment is often easier than a cure (Cooper & Cartwright, 1994). It has been argued that the simplistic notion of "one size fits all" (Elkin & Rosch, 1990) implicit in many secondary and tertiary interventions is not appropriate when addressing occupational stress (Cooper & Cartwright, 1994) and occupational mental health (APA/NIOSH, 1992). According to Sauter and his colleagues (1990), secondary interventions in the form of health promotion programmes and tertiary interventions such as EAP services should "evolve to a higher state of awareness and practice, recognising both occupational and nonoccupational factors as influential to health, and offering opportunities for both organisational and individual interventions to improve employee mental health" (p. 1156).

According to Quick et al. (1992), tertiary prevention is the last resort in the sequence of preventative actions. "We are not aware of any disease epidemic in human history that has been stopped through treatment. Treatment is always a last resort for advancing public health, whether that be medically or psychologically" (Quick et al., 1992, p.11). Although the acknowledgement that the availability of secondary and tertiary intervention is important, it has been argued that the elimination of workplace mental health risks minimises the need for such interventions (Quick et al.). According to Cooper and Cartwright (1994) a 'healthy' organisation will be an organisation in which secondary and tertiary interventions are unnecessary as the effective use of organisational resources aimed at reducing or eliminating workplace stressors would negate the reactive interventions characteristic of secondary and tertiary prevention. Primary prevention represents the most direct way to reduce occupational stress since it deals with the source of distress (Burke, 1993). This approach has been termed proactive and preventative which is in contrast to the reactive and recuperative characteristics of secondary and tertiary interventions (Cooper & Cartwright, 1994).

It has been argued that prevention in the field of occupational stress and occupational mental health should therefore address not only the effects of stress at an individual level, but the possible causes of occupational stress on an organisational level (Gardell, 1982). It appears important and necessary to combat those aspects of technology and work organisation that may be important

contributors to occupational stress and negative mental health outcomes (Gardell). This approach advocates a preventative approach to occupational stress and mental health, rather than a 'band-aid' curative approach (Sutherland & Cooper, 1993).

It has been argued that beyond the 1990's, stressor-specific and organisational-level interventions will be required to deal with the emergent changes in the workplace and the workforce (Murphy, 1995). Such changes could have accompanying important effects on employee well-being and organisational effectiveness (Murphy). "Whether group or individual approaches are employed, it is also essential to modify hazardous working conditions to avoid the paradox of 'healthy people in unhealthy places'" (Pelletier & Lutz, 1988, p. 12).

The direct and indirect costs of poor mental health and occupational stress, coupled with the increasing prevalence of stress in the workplace (Murphy, 1995), will continue to prompt more organisations to seek out innovative ways to prevent or reduce employee stress. It has been projected that mental health will be a mainstream occupational health concern within the next ten years (Tollestrup, 1994b), therefore workplace interventions that are comprehensive in addressing individual and organisational factors, involving all levels of the organisation in the process, hold the greatest promise for the effective prevention of occupational stressors (Murphy, 1995). Such an approach to workplace interventions would be aligned with the interest of promoting mental health in the workplace.

The Present Study

Justification

A significant amount of research and literature concerning occupational stress and mental health in the workplace has been published in the United States and Scandinavian countries. The impact of stressors in the workplace as a contributory factor in the manifestation of poor mental well-being is well established in the organisational and social psychological literature. Exploration into the relationship between work and non-work factors and individual well-

being has incorporated possible work-based intervention strategies addressing occupational stress and mental health.

The workplace has been argued to represent a microcosm of the general community and therefore, the stresses and psychological disorders prevalent in the community at large are argued to be reflected in the workplace (Sauter et al., 1990). According to a Ministry of Health report on mental health (New Zealand Herald, December 17 1997), each generation of New Zealanders appears to be more depressed than the previous one. Mental disorders have been reported by the Ministry of Health to be relatively common, with generalised anxiety, alcohol abuse and depression the most common disorders (New Zealand Herald).

According to the New Zealand Herald report, two-thirds of the New Zealand population is estimated to experience at least one episode of mental dysfunction in their life, proportions of which are members of the workforce.

Despite the fact that international data on direct and indirect costs are accumulating to provide an increasingly clear picture of the impact of poor mental health in the workplace, research initiatives in New Zealand concerning this area are minimal. New Zealand research into the prevalence of mental health disorders in general communities has been conducted (e.g. New Zealand Herald, 1997; Wells et al., 1989), however the surveillance of psychological disorders in the New Zealand workplace is extremely restricted. Although estimations cited earlier give some indication of the prevalence of psychological issues, alcohol abuse and chemical dependency as occupational health problems, New Zealand information sources that are required for effective surveillance of occupational mental health disorders are limited. Contemporary research has been conducted concerning alcohol programmes and practices in New Zealand organisations (see Inkson, n.d., and Pringle, in press cited in Harris & Trusty, 1997). research has provided insights into employer perceptions of alcohol prevalence, alcohol use at work, alcohol intervention programmes and company policies regarding alcohol abuse.

A study has been conducted in Northern Ireland which included a survey of management perceptions of stress (see McHugh & Bryson, 1992 cited in Daniels, 1996). On commenting on the survey, Daniels argued that there is a need to obtain a greater understanding on how management perceive the risks of stress and the costs and benefits associated with various stress management

interventions or mental health programmes. To date, no New Zealand research exists that examines Human Resource practitioners' perceptions of mental health issues within the New Zealand working environment. The present research therefore represents an effort towards developing a greater understanding of Human Resource practitioners' perceptions and practices concerning the topic of occupational mental health.

Aims and Objectives

The present research aims to address the issue of mental health in the workplace by way of exploring Human Resource practitioners' perceptions and practices concerning this issue. Human Resource practitioners were chosen as the sample population for this study due to their involvement in the 'human resource cycle' (Wolfe, Parker, & Napier, 1994). This cycle incorporates the generic functions of Human Resource management which include: recruitment and selection; appraisal; training and development; rewards and benefits; organisational design and communication (Wolfe et al.). Additionally, it has been suggested that the human resources of an organisation represent the most common selector and driver of interventions addressing employee health (Megranahan, 1995). Human Resource practitioners' involvement in these generic functions highlights their dual concern with employee well-being and organisational effectiveness and underscores the relevance of this population with regard to their perceptions and hence influence on policy making in relation to mental health issues in the workplace.

It is hoped, that an as exploratory piece of research, the study will provide valuable information within the New Zealand context and provide a reference point for further research initiatives into the area of occupational mental health. An exploratory research tool in the form of a questionnaire incorporating quantitative and qualitative components was constructed in order to develop an initial understanding of the following main research concerns:

 Human Resource practitioners' perceptions of organisational responsibility with regard to mental health issues.

- Human Resource practitioners' perceptions of the prevalence of poor mental health in:
 - a) the New Zealand workplace;
 - b) the organisations with whom they work.
- 3. Human Resource practitioners' perceptions of the impact of various stressors on employee mental health, including:
 - a) work factors;
 - b) non-work factors.
- 4. Human Resource practitioners' perceptions of the impact of poor employee mental health at the following levels:
 - a) individual level;
 - b) organisational level.
- 5. Human Resource practitioners' perceptions of work-based intervention strategies that address occupational mental health issues. This objective includes an exploration into the following:
 - a) the implementation of interventions addressing occupational mental health issues;
 - Human Resource practitioners' perceptions concerning the future implementation of workplace interventions addressing occupational mental health issues;
 - c) Human Resource practitioners' perceptions of the effectiveness of interventions addressing occupational mental health issues.
- Demographic differences with regard to Human Resource practitioners' perceptions of various occupational mental health issues.

CHAPTER THREE: METHODOLOGY

Method

The present research was designed to be an exploratory study, utilising the survey method of research. A questionnaire (see Appendix A) was used as the survey technique to collect descriptive survey data regarding Human Resource practitioners' perceptions of mental health in the workplace. The questionnaire was constructed as an exploratory research tool to elicit information on a subject area that had not previously been explored through the use of a quantitative or qualitative research method in the New Zealand workplace. As the research was exploratory in nature and designed to develop an initial understanding of Human Resource practitioners' perceptions of occupational mental health issues, no pilot study was conducted.

Human Resource practitioners within New Zealand were chosen as the sample population for the study. Human Resource practitioners are concerned with the management of people in the workplace (Boxall, 1995a) and they often play an important role in providing solutions to workplace problems. According to Boxall (1995b), "The challenge of HRM [Human Resource Management] lies in grasping the true significance of employment relations and committing to a process of producing better outcomes for both firms and workers..." (p.305). In meeting this challenge, Human Resource practitioners generally involve themselves in the development of improved organisational practices and policies that contribute to the quality of work life and organisational efficiency (Dessler, This involvement stems from an understanding of the important contribution of human resources to organisational competitive advantage and efficiency (Boxall, 1995b). Furthermore, Human Resource practitioners have an understanding of the quality of work life of the workplace itself and the ways in which organisational culture, morale and the psychological environment of the workplace impact upon individual well-being (Dessler, 1994).

Coupled with the above mentioned functions and responsibilities associated with Human Resource practice, "HRM groups are increasingly called on to deal with employee reactions to emerging workplace issues, such as reorganisations, downsizing, mergers/acquisitions, comparable worth, and

workforce diversity, each of which has potential for creating stress and influencing employee health and well-being" (Murphy, 1995). It therefore appeared intuitive that Human Resource practitioners would be an appropriate sample population to approach concerning the issue of occupational mental health. Their close liaison between employee well-being and organisational effectiveness underscores the relevance of this population with regard to their perceptions of mental health issues in the workplace.

Within the sample population, a distinction was made between the following three sub-groups of Human Resource practitioners (see Table 1):

- <u>Internal Human Resource practitioners</u>: Human Resource practitioners who are employed within an organisation;
- External Human Resource practitioners: Consultancy-based Human Resource practitioners;
- <u>Both:</u> Those Human Resource practitioners who categorised themselves as being both Internal and External practitioners.

This distinction was reflective of the different ways in which Human Resource practitioners practice within New Zealand. Such a distinction allowed participants in the research to categorise themselves appropriately, without being forced into any one of the above categories. This in turn allowed for more useful analysis.

Sample

The Institute of Personnel Management New Zealand Incorporated (IPMNZ) was approached to assist in the recruitment of potential participants to the study. A research proposal detailing the rationale and objectives of the present research was forwarded to the President of the Institute. The proposal and the questionnaire to be used as the research tool were reviewed by the Institute's research committee, who agreed to provide assistance in the identification of the sample population.

For the purpose of the research, IPMNZ staff accessed 600 Wellington and 625 Auckland based Human Resource practitioners who were members of their organisation. This was done via their database which held information detailing the names and postal addresses of members to the Institute. These members were then placed in alphabetical order. Random selection of potential participants was made by staff members of IPMNZ. Student and retired practitioner members of the Institute were excluded as the research was designed to explore the perceptions held by practising Human Resource practitioners. Every second name was selected, and in this way, individuals were selected as potential participants to the study.

The sample consisted of 625 randomly selected Human Resource practitioners within the Auckland and Wellington regions of New Zealand. The final number of participants who responded to the survey was 164, which resulted in a 26% response rate.

General Demographic Characteristics of the Sample

As shown in Table 1, the highest percentage (65%) of respondents were Internal Human Resource practitioners and the highest percentage (60%) of the respondents were female. Sixty-two percent of the respondents were aged between 30 years and 49 years.

Overall, 61% of the respondents had undertaken undergraduate studies (this includes the 'diploma' category) and 30% held post-graduate degrees. Therefore 91% of the respondents had tertiary qualifications. Appendix B shows the subject areas of the highest level of education achieved by respondents. This table indicates that human resource management, psychology and business studies were popular subject areas across qualifications.

Table 1

Demographic characteristics of sample (n=164)

Variable	Frequency	% of category	% of total (n=164)
Internal Human Resource practitioners	106	65	65
External Human Resource practitioners	42	26	26
Both	. 14	9	9
Gender (n=163)			
Female	98	60	60
Male	65	40	40
Age (n=154)			
20-29 years	27	18	16
30-39 years	49	32	30
40-49 years	52	34	32
50-59 years	25	16	15
60-69 years	1	1	1
Education (n=159)			
Bachelors degree	66	42	40
Masters degree	37	23	23
Diploma	35	22	21
Secondary school certificate	10	6	6
Honours degree	8	5	5
Doctorate	3	2	2
Tenure (n=163)			
Less that 5 years	58	36	35
5-10 years	47	29	29
11-20 years	46	28	28
More than 20 years	12	7	7

Note. Allowance for slight deviations in total percentage figures in tables representing percentages is required due to decimal rounding.

As can be seen in Table 1, the highest percentage of respondents had been practising as Human Resource practitioners for less than 5 years.

The highest percentage of respondents, regardless of job description worked with organisations who employed over 80 full-time employees (85%) and under 20 part-time employees (46%).

Of the 106 respondents who were Internal Human Resource practitioners, 20% worked within government departments and 13% worked within the service industry. Percentage distributions for the remainder of these practitioners did not reveal any significant results and small percentages were distributed throughout the remaining industry types identified in the survey. Table C1 (see Appendix C), illustrates additional industries in which this sub-sample of Human Resource practitioners worked. These industries were not included in the response set given in the survey.

Of the 42 External Human Resource practitioners, the highest response percentages revealed the following: 23% worked with organisations in the service industry, 20% worked with organisations in the financial industry, 18% worked with organisations in the manufacturing industry and 15% worked with organisations in the education industry. Additional industry/industries to whom this sub-sample of Human Resource practitioners consult is shown in Table C2 (see Appendix C). These industry types were not included in the response set given in the survey.

Relationships between Demographic Variables

Job Description and Gender

Cross-tabulations between the variables of Job Description and Gender revealed that the 60:40 percentage distribution of females to males generally remained constant across job description. Of the male respondents, 68% were Internal Human Resource practitioners and 23% were External Human Resource practitioners. Similarly, of the female respondents, 62% were Internal Human Resource practitioners and 28% were External practitioners. Of the 14 respondents that were categorised as Both, nine were female.

Education and Job Description

Cross-tabulations between the variables Education and Job Description revealed that of those practitioners with a masters degree, 49% practiced as External Human Resource practitioners and 46% practiced as Internal practitioners. Of those practitioners who held a doctorate, 67% were External Human Resource practitioners and 33% were Internal practitioners. For the remainder of the respondents the opposite applied as a significant majority practised as Internal practitioners regardless of education level achieved. Of the respondents who held a secondary school certificate, 40% practiced as both Internal and External Human Resource practitioners.

Forty-two percent of Human Resource practitioners who practiced as Internal practitioners held a bachelors degree and 27% held a diploma. Of those practitioners who practiced as External consultants, 43% held masters degrees and 36% held bachelors degrees. Of those practitioners that categorised themselves as Both, 36% held bachelors degrees and 29% had a secondary school certificate.

Tenure and Job Description

Cross-tabulations between Tenure and Job Description indicated that despite tenure, a significant percentage of the respondents were External Human Resource practitioners. An exception was those practitioners who had been practising for 20 years and more. Of these practitioners, 42% were Internal practitioners and the same percentage were External practitioners. The highest percentage of those practitioners that had categorised themselves as Both had been practising for 20 years or more.

Sixty-seven percent of the respondents who practiced as Internal practitioners had been practising for less than 10 years. Thirty-eight percent of the External practitioners had been practising for less than five years and 31% had been practising from 11 to 20 years. Of those practitioners categorised as Both, 64% had been practising for less than 10 years.

Procedure

A research proposal describing the present study was forwarded to the Massey University Human Ethics Committee, who approved the method to be used in order to reach the objectives of the research.

The survey on mental health in the workplace was mailed from IPMNZ to the sample of 625 Auckland and Wellington based Human Resource practitioners. The mailing out was done on a Monday afternoon to ensure that the potential participants received the questionnaire by Thursday, enabling them to complete it by the end of the weekend. According to de Vaus (1995), a mail-out date should be selected at the beginning of the week in order to maximise response rates in postal surveys.

The survey instrument was mailed to the sample of Human Resource practitioners and contained the following:

- A questionnaire on mental health in the workplace.
- An information sheet (see Appendix A) which invited practitioners to
 participate in the research by completing and returning the questionnaire. A
 clear description of the nature and duration of the participants' involvement
 was provided as well as a clear indication that potential participants had a
 right to decline to take part in the study and that completing the questionnaire
 implied consent.

Potential participants were assured that in accordance with the Privacy Act 1993, the researcher did not have access to the membership database held at IPMNZ at any stage. Attention was drawn to the fact that the researcher was not involved in the random selection of potential participants, nor the mailing of the questionnaires. This ensured the anonymity of the participants to the research. Potential participants were made aware that the coding of the questionnaire further ensured their anonymity. Indication was given to potential participants that a summary of the results of the study would be made available to them via IPMNZ.

 A postage paid, self-addressed envelope was included to minimise the effort required in returning the questionnaire and to maximise the response rate of the survey.

Two weeks after the questionnaire had been mailed out to potential participants, a reminder note was published in the Auckland and Wellington member newsletters by IPMNZ. The reminder note was intended to thank early responders and gave additional information as to the final date for the return of the questionnaires.

Measures

The Questionnaire

The self-administered questionnaire on mental health in the workplace includes five sections which address various separate issues revolving around the topic of occupational mental health.

Questionnaire Design and Content

Literature concerning research methodology (e.g. Shaughnessy & Zechmeister, 1990), surveys in social research (e.g. Babbie, 1989; de Vaus, 1995; May, 1997) and questionnaire design (e.g. Oppenheim, 1992) was reviewed in order to gain an understanding of the methodology that informs survey research and questionnaire construction issues. The literature source that provided the most comprehensive coverage of survey research was written by de Vaus (1995). This literature source shared many of the same guidelines characteristic of the other research literature that was reviewed and the opinion expressed by de Vaus often reinforced the opinion held by similar authors. Frequent citations of de Vaus does not therefore represent a total reliance on one source, but rather represents a reliance on a set of literature that was best articulated by de Vaus (1995).

The organisational and social psychological literature surrounding the topic of occupational mental health and psychological stress in the workplace

was reviewed in order to gain an understanding of the main issues of the subject area. This literature gave an indication as to the extent of less recent and contemporary knowledge concerning occupational mental health issues as well as an indication of the research that had been conducted into this subject area. A theoretical starting point for the research was then established along with an indication of what the present research could contribute to existing occupational mental health literature and research. From this starting point, areas of interest were identified, examined and integrated to provide a framework for the development of the research objectives and the content of the questionnaire.

Clarifying Concepts and the Development of Indicators

According to de Vaus (1995), it is crucial that the concepts used in research be defined. In an attempt to provide clarity to the concept of occupational mental health, the following steps were taken:

Step One. A range of definitions of the concept of occupational mental health were obtained from the relevant organisational and social psychological literature. The common elements of these definitions were examined in order to develop an operational definition for the research. The working definition of occupational mental health provided a focus to the research and guidance as to the type of information that the study needed to collect.

Step Two. The main dimensions of the concept of occupational mental health were then identified. De Vaus (1995) argues that this identification can lead to more thorough analysis. The various dimensions of occupational mental health facilitated the development of the research objectives and the construction of the sections of the questionnaire. The main dimensions of occupational mental health that were identified for the purpose of the present study were:

- Work and Non-Work stressors and their impact on occupational mental health.
- Individual and Organisational outcomes of poor occupational mental health.

Work-based intervention strategies addressing occupational mental health issues.

Step Three. In order to move from the definition of occupational mental health and its associated dimensions to develop the questionnaire, the process of clarifying concepts moved to one of developing indicators. In other words, the process moved from the broad to the specific. Characteristic of this process is the specification of dimensions, the sub-division of dimensions and the definition of the sub-dimensions (de Vaus, 1995).

In summary, before the onset of the questionnaire construction, a thorough understanding of occupational mental health and its associated dimensions had been attained. The general aims for the study had been developed into a set of specific objectives and the indicators required to elicit information had been identified.

Step Four. A model was developed (see Figure 3) which specified the dimensions and indicators of occupational mental health to be explored by the study.

Specific frameworks that informed the development through the above mentioned steps also provided guidance in the development of the research model for the present study. These frameworks were provided by Ivancevich and his colleagues (1990) who devised a model on worksite stress management interventions and the model outlining the sources of stress revised by Cooper (1983; see Chapter 2, Figure 2). A model devised by Quick, Murphy, Hurrell, and Orman (1992) on occupational well-being, mental health promotion and distress prevention was also pivotal to the construction of the present research model (see Chapter 2, Figure 1).

As can be seen in Figure 3, the model that guided the development of the questionnaire content for the present research outlines the three main dimensions associated with occupational mental health, namely: stressors; outcomes and interventions. These dimensions formed three of the six sections of the questionnaire.

OCCUPATIONAL MENTAL HEALTH

Dimension 1

STRESSORS

Factors that may play a role in the development of poor mental health

Indicators

Individual Level

Non-Work Factors

Organisational level

Work Factors

Dimension 2
OUTCOMES

Outcomes of poor mental health in the workplace

Indicators

Individual Level

Outcomes that affect

the individual

Organisational Level

Outcomes that affect

the organisation

Dimension 3

INTERVENTIONS

Work-based intervention strategies that address occupational mental health issues

1

IMPLEMENTATION

EFFECTIVENESS

Indicators

Primary Intervention

Interventions aimed at improving the organisational environment

Secondary Intervention

Interventions aimed at training individual individuals to cope with workplace demands

Tertiary Intervention

Interventions aimed at treating employee

in distress

Figure 3. A model of occupational mental health: dimensions and indicators

From these dimensions, the more specific indicators that were developed facilitated the formation of the questions to be included in each respective section of the questionnaire.

The three sections of the questionnaire that were not outlined in the model (see Figure 3), complimented the main dimensions of occupational mental health. The first of these three sections was designed to be introductory in nature and the second to constitute an attempt to develop a scale on attitudes towards mental health in the workplace. The third of these three sections was concerned with the demographic information of the sample.

Throughout the questionnaire, questions concerning the prevalence of poor mental health and associated outcomes where divided into general categories that were informed by the literature (see Sauter et al., 1990). These categories included:

- 1. Psychological/emotional issues
- 2. Alcohol abuse
- 3. Chemical dependency

The first category of Psychological/Emotional issues was further subdivided in Section Three of the questionnaire to include:

- Anxiety
- Depression
- Burnout

This categorisation was consistent with the breakdown in the literature (Sauter et al., 1990; Sperry, 1994; Wells et al., 1989) concerning the prevalence of poor mental health and its associated outcomes, both in the workplace and in more generalised populations. It was also consistent with the definition of occupational mental health and occupational mental health practice.

Overview of Questionnaire Content

Section One: Introduction. The first page of the questionnaire gives a brief definition of occupational mental health. This definition is followed by Section One of the questionnaire. This section is introductory in nature and addresses three areas namely:

- organisational responsibility with regard to addressing mental health issues in the workplace;
- the general prevalence of poor mental health in the New Zealand workplace, including an exploration into specific categories of mental health problems in organisations;
- the issue of intervention to address mental health in the workplace.

Section Two: Perceived Stressors. This section addresses work and non-work factors that may play a role in the development of poor mental health. The majority of the indicators for the dimension of 'stressors' that informed the question content of this section are taken from Cooper's revised model of occupational stress (1983). The model outlines six major sources of stress which include:

- 1. Factors intrinsic to the job;
- 2. Role in the organisation;
- 3. Career development;
- 4. Relationships at work;
- 5. Organisational structure and climate;
- 6. Home: work interface.

These six factors in turn have various sub-factors which further explain the way in which they may contribute to the outcome of stress (Cooper, 1983). Cooper's model was extremely useful in naming workplace-relevant causal factors contributing to negative and/or positive outcomes amongst individuals.

The section is divided into two questions which focus on organisational and individual stressors respectively. The first five factors identified by Cooper

(1983) are included in the first question in this section. These factors are referred to as 'work factors' in the questionnaire and the question associated with them attempts to ascertain the extent to which these factors are perceived to impact upon employee mental health. The sixth factor identified by Cooper (1983), namely the home:work interface is included as 'non-work' factors in the second question of this section, again to ascertain the extent to which these factors are perceived to impact upon employee mental health.

Sub-factors in both the 'work' and 'non work' category questions that were not included in Cooper's (1983) model were included as a result of an examination of additional literature (e.g. Armstrong-Strassen, 1994; Briner & Hockey, 1994; Burke, 1994; Cooper & Cartwright, 1994; Fletcher, 1988; Gardell, 1982; 1987; Gutek et al., 1994; Karasek & Theorell, 1994). This was done in order to arrive at a comprehensive list of possible factors that may impact upon employee mental health.

Section Three: Perceived Outcomes. This section addresses individual and organisational level outcomes of poor mental health in the workplace. The section begins with an exploration into the prevalence of various mental health outcomes in the organisations with which the respondents' have work contact.

As a result of a distinction made between organisational and individual level outcomes of poor mental health in the model devised by Ivancevich and his colleagues (1990), the remainder of the section is divided into two questions which address organisational outcomes and individual outcomes respectively. These questions were designed to ascertain the extent to which mental health is perceived by Human Resource practitioners to impact upon organisational outcomes and individual outcomes.

Section Four: Intervention Strategies. This section addresses work-based intervention strategies that focus on mental health issues in the workplace. Throughout the section, interventions are categorised in accordance with the classification given by Quick et al. (1992). This classification makes a distinction between primary, secondary and tertiary interventions.

The section is divided into two sub-sections. As can be seen in Figure 3, the first sub-section addresses the issue of the implementation of various

primary, secondary and tertiary interventions. The second sub-section is designed to ascertain the perceived effectiveness of primary, secondary and tertiary interventions aimed at addressing mental health issues in the workplace.

Two questions concerning the topic of surveys to ascertain perceived employee needs for Employee Assistance Programme services were included in this section due to the increasing prevalence of this intervention strategy both abroad and New Zealand (see Murphy, 1988; Tollestrup, 1994b).

Section Five: Attitudinal Scale. This section is included in the questionnaire as a number of attitude statements dealing with occupational mental health issues. Each statement requires a response based on a five point Likert-style scale. The aim of this section is to use the responses given by each respondent to develop a scale on attitudes towards occupational mental health.

Section six: Demographics. This section is designed to elicit demographic information from each respondent to aid in the classification of responses and to make statistical comparisons. Demographic variables that are explored in the section include:

- Educational level
- Age
- Gender
- Tenure

This section also makes the distinction between different types of Human Resource practitioners (see Table 1). The questions in this section also explore variables such as organisational size and industry types in which the respondents work as practitioners, as well as the existence of organisational policies that have relevance to occupational mental health.

Questionnaire Construction Issues

Throughout the construction of the questionnaire, attention was given to establishing a balance between the inclusion of valuable items in the questionnaire, drawn from a large literature pool, while ensuring that the length of the questionnaire remained reasonable.

Question Wording

To accomplish the development of clear, unambiguous and useful questions, attention was given to the development of the following wording characteristics outlined by de Vaus (1995) and Oppenheim (1992):

- Jargon and technical terms were avoided as much as possible in order to produce questions characterised by simple language;
- The length of questions was kept to a minimum without affecting the question content and meaning;
- · Questions were constructed not to be leading in any way;
- The use of negatives and double-negatives in questions was avoided to reduce confusion (scale items were an exception);
- Questions were characterised by impersonal wording in order to explore the respondents' perceptions concerning various issues;
- Alternative response sets were provided for the majority of the closed-ended questions to serve as useful prompts for respondents.

Question Types

The response format of the questionnaire included both open and closed formats. The questionnaire consisted of 10 open-ended questions and 50 closed-ended questions.

<u>Closed-ended questions.</u> The closed-ended questions consisted of both factual and non-factual items and were followed by a number of alternative

response categories from which the respondents were to select an appropriate answer/s. When a questionnaire is lengthly and self-administered, such as this questionnaire was, de Vaus (1995) recommends the use of closed-ended questions. Closed-ended questions are easily coded and allow respondents to classify themselves, thereby avoiding researcher misclassification (de Vaus). Attention was given to the alternate response categories to ensure that they were exhaustive to avoid biasing responses. The category 'other (please specify)' was included to allow for unanticipated responses.

The closed-ended questions contained simple 'yes-no' alternatives, Likert-style formats and checklists. A large proportion of Likert-style format questions required responses based on a five point rating scale to determine the intensity of the respondents' response.

Closed-ended questions were generally used to ascertain whether or not the respondent had thought about or was aware of certain issues; to ascertain specific aspects of various issues and to elicit information as to the strength of the respondents response (de Vaus, 1995).

Open-ended questions. The open-ended questions required respondents to formulate their own responses. They were designed to ascertain general thoughts with regard to certain issues and to gain information regarding respondent's reasons for their responses on various issues (de Vaus, 1995). Various open-ended questions were included as follow up questions to closed-ended items. This sequencing of question types according to May (1997), is useful. They provided an opportunity to probe (Oppenheim, 1992). Although de Vaus (1995) recommends that open-ended questions be kept to a minimum, the inclusion of the 10 open-ended questions in the questionnaire complimented the exploratory nature of the research.

Questionnaire Layout

The following areas identified by de Vaus (1995) were given careful examination when combining questions into the questionnaire:

Answering procedures. Response boxes were placed at the end of each closed-ended question. Respondents were requested to answer each question by placing a tick in the most appropriate box/es. Due to the fact that Likert-style questions were used frequently throughout the questionnaire, the boxes were presented in a matrix format for a large proportion of the questions.

Open-ended questions were followed by sufficient space for response. Leaving too large a space was avoided as this could have discouraged respondents from answering these questions due to time constraints (de Vaus, 1995).

Contingency questions. A contingency question was placed in Section Six of the questionnaire to distinguish between different types of Human Resource practitioners. Other contingency questions were included in instances were certain responses would render certain questions non-applicable. Bold font was used to avoid confusion in answering this question.

Instructions. General instructions to the questionnaire were given on the first page of the questionnaire following a definition of occupational mental health. Each section of the questionnaire began with a brief introduction. This facilitated an understanding of the issues that were addressed in different sections of the questionnaire. Question instructions were given throughout the questionnaire to facilitate easy interpretation of the questions and gave the respondents an indication as to the number of boxes that could be ticked. According to May (1997) classification questions require an explanation to the respondents, otherwise they may not see the need for them. Therefore, an explanation was provided alongside the instructions given for Section Six as to why respondents' demographic information was required for the study.

Order of questions. According to de Vaus (1995), a good questionnaire is characterised by a logical flow of questions. The questionnaire on mental health in the workplace was characterised by sections that followed a logical content progression. This is illustrated in Figure 4.

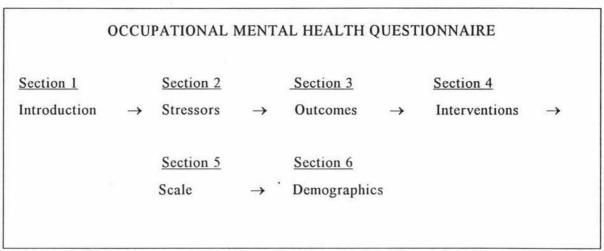


Figure 4. Order of questionnaire sections

Acknowledging the recommendations made by de Vaus (1995) and Oppenheim (1992), the questionnaire commenced with questions that were easily answered and interesting. Time was taken to ensure that the initial questions were obviously relevant to the purpose of the survey. The questions within each section of the questionnaire gradually progressed from concrete to abstract questions and simultaneously moved from the general to the specific. A variety of question formats were used to ensure that the questionnaire remained interesting to the respondents. As can be seen in Figure 4, the demographic section was placed at the end of the questionnaire. This placement corresponded with the order of questions recommended by de Vaus (1995) and Oppenheim (1992), who suggested that demographic information should be placed at the end of a questionnaire. The questionnaire ended with two open-ended questions that allowed respondents to reflect back on the issues mentioned in the questionnaire and make recommendations as to what they would require in order to be equipped to deal with occupational mental health issues.

Setting up for coding. According to May (1997) most questionnaires are pre-coded to allow for the classification of responses into analysable and meaningful categories. In preparation for data analysis by computer, question items were allocated variable numbers and each answer to a question was given a code. A missing data code was also allocated. These variable numbers and codes representing each answer were printed on the questionnaire itself. It was

not necessary to provide codes for variables characterised by answers in numerical form. Pre-coding was only possible for closed-ended questions. Answers to open-ended parts of essentially closed-ended questions were placed into categories and then coded once the questionnaires had been returned. Open-ended questions were analysed using qualitative content analysis.

Coding

Once a code had been allocated to each response to a question, a systematic record of the decisions that were made was kept in the form of a codebook. The codebook was essential to the coding of each questionnaire that was returned and to the recording of responses onto a spreadsheet. It was also helpful in the initial computer analysis stage of the research. The following points were included for each question in the codebook according to the outline provided by de Vaus (1995):

- The question number and question asked;
- The variable number;
- · The variable name;
- A list of the valid codes for each question (including missing data codes);
- · A list of any special coding instructions.

Mental Health Scale

After studying the literature on the concept of occupational mental health and its associated dimensions, a set of attitude statements was developed which appeared to measure this concept. These statements formed Section Five of the questionnaire which included a Likert scale. The attitude statements consisted of a mixture of favourable and unfavourable statements to which respondents were required to express their extent of agreement or disagreement. This was done in order to avoid an acquiescent response set (de Vaus, 1995). According to de Vaus the principle of scaling is to combine only those statements underlying the concept to be measured. Therefore, the statements included in

the scale were selected to reflect orientation towards an attitude on occupational mental health.

Data Analysis

Quantitative Data

The closed-ended questions included in the questionnaire constituted the quantitative component to the research. Responses to the pre-coded closed-ended questions were entered onto a spreadsheet. The spreadsheet was then converted into a data file which could be submitted to computer analysis. After the data in the data file had been screened, various analyses were conducted using the Statistical Analysis System (SAS) software package to produce descriptive and inferential statistical information.

Owing to the fact that nine percent of the respondents categorised themselves as being both Internal and External practitioners, Questions 42D & E and 43D & E of Section Six (Demographics) of the questionnaire could not be accurately submitted to quantitative data analysis.

Qualitative Data

The open-ended questions, which included the 'other (please specify)' components to essentially closed-ended questions were analysed using qualitative content analysis. According to Miles and Huberman (1994) content analysis is a process of searching for 'repeatable regularities'. Dey (1993) describes content analysis as a process of finding categories and themes from the data. Categories begin large and are gradually refined into smaller sub-categories.

Responses to the open-ended questions were recorded onto a computer document file. According to May (1997) each questionnaire should be given a unique identification number. This allocation of a number to each questionnaire was useful in that each recorded response was accompanied by the corresponding questionnaire number which was placed at the top right hand corner of the questionnaire. This allowed for the tabulation of frequencies at a

later stage of the content analysis and also ensured that a questionnaire and the responses contained within it could be easily retrieved in ambiguous situations.

Responses within questions that followed the same theme were clustered together. These clusters were analysed into broad categories and labels were assigned to the responses within each broad category. According to Miles and Huberman (1994), such labels enable the assignment of units of meaning to descriptive information obtained in a study. Various broad categories were further analysed into sub-categories: The numbers in each category and sub-category were calculated which enabled the tabulation of frequencies and percentages for each open-ended question and associated categories. According to Miles and Huberman, counting the numbers in each category is an important part of content analysis. They make the comment that the use of numbers is a useful way of looking at distributions and aids the analyst in remaining analytically honest.

Question 38 of Section Six of the questionnaire was omitted from the content analyses as the responses to this question were extremely diverse. The researcher was confident that the categorisation of these responses would not contribute to the interpretability of the results.

CHAPTER FOUR: RESULTS

The quantitative components of the questionnaire were analysed using the Statistical Analysis System (SAS) software package. The open-ended, qualitative questions included in the questionnaire were content analysed into categories and sub-categories.

Prior to conducting the main analysis, the data which had been entered into the data file were screened. The summary statistics were checked in order to determine the accuracy with which the data had been entered into the data file. The maximum and minimum scores for each variable in the data file were checked in order to identify idiosyncratic data that did not correspond with the codes given for each variable in the codebook. A group of twenty questionnaires were randomly selected to further check that the codes that had been noted on the questionnaires had been accurately entered into the data file. No inaccuracies were found in the coding and entering of data for all twenty questionnaires. The frequency distributions for each variable were examined to identify any counter-intuitive distributions, however, no idiosyncratic distributions were identified.

Descriptive Statistics

Perceived Responsibility to Address Occupational Mental Health Issues

Ninety-four percent of the Human Resource practitioners responded that organisations have a responsibility to address mental health issues. Table 2 presents a content analysis summary of the practitioners' justification to their responses concerning organisational responsibility to address mental health issues and shows the categories into which their perceptions were coded.

The tables presenting summaries of the content analyses conducted on open-ended questions immediately proceeding closed-ended formats have been divided into two groups of categories throughout the descriptive statistics section of the results. These tables present the category groups into which the Human Resource practitioners' justifications to their responses were coded. Each category group corresponds with the responses [either positive (YES) or

negative (NO)] that were given to the closed-ended questions characterised by this format. Definitions of what constituted a positive (YES) and negative (NO) response to such questions are provided in the notes to the tables presenting two groups of categories into which the Human Resource practitioners' perceptions were coded.

Many respondents gave answers to the open-ended formats within the questionnaire that included a number of comments. For this reason, the combined frequencies within categories in tables presenting content analysis summaries may sum to more than the respective given sample sizes.

Table 2

<u>Categories of the Human Resource practitioners' perceptions of organisational responsibility to address mental health issues</u>

Category	Frequency	% of category
YES (n=132)		
1. Contribution to organisational efficiency	59	45
2. Legal obligation	30	23
3. Organisation as a key player in employee mental health	29	22
4. Commitment to good employer-employee relations	18	14
5. Mental health issues share the same importance as other		
occupational health issues	14	11
6. Joint individual and organisational responsibility	8	6
7. Responsibility in terms of referral of employees to		
appropriate agencies only	5	4
NO (n=5)		
1. Limited need	3	60
2. Government responsibility	2	40
3. Individual responsibility	2	40
4. Limited to workplace induced problems only	1	20

Note. YES = Organisations have a responsibility to address mental health issues

NO = Organisations do not have a responsibility to address mental health issues

Of those Human Resource practitioners who responded that organisations have a responsibility to address mental health issues, the following justifications were characterised by higher percentages:

- Responsibility to address mental health issues in the workplace constitutes a
 contribution to organisational efficiency in terms of productivity and
 organisational functioning. This justification was exemplified in a
 respondent's comment that 'healthy employees contribute to healthy
 organisations';
- Employers are obligated under the Health and Safety in Employment Act
 (1992) to address issues relating to employee well-being;
- Organisations play a key role in employee mental health.

Justifications characterised by higher percentages of the practitioners who responded that organisations do not have a responsibility to address mental health issues were as follows:

- There is a limited need in organisations to address mental health issues;
- The responsibility of addressing mental health issues lies with the government;
- It is the individual's responsibility to ensure his/her mental well-being.

Perceived Prevalence of Poor Mental Health in the Workplace

Only 17% of the Human Resource practitioners categorised poor mental health in the New Zealand workplace as prevalent. Seventy-four percent of the practitioners considered poor mental health in the New Zealand workplace as moderately prevalent to not prevalent at all.

Table 3 shows the extent to which the Human Resource practitioners perceive chemical dependency, alcohol abuse and psychological/emotional issues as problems in the workplace.

As shown in Table 3, a higher percentage of the respondents perceived chemical dependency and alcohol abuse as moderate or minor workplace problems. This trend was not apparent in the percentage distribution concerning the respondents' perceptions of psychological/emotional issues. A higher percentage of the Human Resource practitioners perceived psychological/

emotional issues as a problem or major problem in the workplace. The percentages shown in Table 3 indicate that psychological/emotional issues were generally perceived to be more of a problem in the workplace than alcohol abuse and chemical dependency.

Table 3

Frequency distributions of the extent to which the Human Resource practitioners

perceive chemical dependency, alcohol abuse and psychological/emotional issues
as problems in the workplace (n=164)

Variable	Moderate or Minor Problem		Problem or Major Problem	
	Frequency	%	Frequency	%
Chemical dependency	111	68	14	9
Alcohol abuse	88	54	26	16
Psychological/emotional				
issues	32	20	71	43

Note. The 'neutral' response category is not included in the table.

Table 4 shows the extent to which the Human Resource practitioners perceive the prevalence of anxiety, burnout, depression, chemical dependency and alcohol abuse in the organisations in which they work.

As shown in Table 4, a higher percentage of the respondents perceived depression, chemical dependency and alcohol abuse as not prevalent or not prevalent at all in their organisations. This trend was not apparent in the percentage distributions concerning the prevalence of the outcomes of anxiety and burnout. A higher percentage of the respondents perceived anxiety and burnout as prevalent or very prevalent in the organisations in which they work. When isolating the frequency distributions of the Human Resource practitioners who perceive the outcomes outlined in Table 4 as prevalent or very prevalent, it is interesting to note that the combined percentages of the three outcomes of anxiety, burnout and depression constituted a high percentage of the total sample. Based on this combination of percentages, the psychological/emotional issues (anxiety, burnout and depression) were generally perceived as being more

prevalent than chemical dependency and alcohol abuse in the respondents' organisations.

Table 4

Frequency distributions of the extent to which the Human Resource practitioners

perceive the prevalence of anxiety, burnout, depression, chemical dependency
and alcohol abuse in the organisations in which they work (n=164)

Outcome	Not Prevalent or Not Prevalent at all		Prevalent or Ver	y Prevalent
	Frequency	%	Frequency	%
Anxiety	35	21	81	49
Burnout	47	29	64	39
Depression	68	41	33	20
Chemical dependency	124	77	8	5
Alcohol abuse	107	65	8	5

Note. The 'neutral' response category is not included in the table.

Similarities were found between the frequency distributions shown in Table 4 and the frequency distributions shown in Table 3. Psychological/emotional issues (anxiety, depression, burnout) emerged as a set of outcomes that were generally perceived as being more prevalent and more of a problem in the workplace in relation to the outcomes of alcohol abuse and chemical dependency.

Table 5 presents a summary of the content analysis of the 'other (please specify)' category that was included in the question concerning the prevalence of various outcomes in the respondents' organisations and shows additional outcomes perceived as being prevalent amongst employees.

The percentage distributions shown in Table 5 reinforced the previous finding of the higher perceived prevalence of psychological/emotional issues in the organisations in which the Human Resource practitioners work.

Table 5

Outcomes perceived as prevalent amongst employees by respondents (n=23)

Category	Frequency	%
Psychological/Emotional Outcomes		
Stress	5	22
Aggression	3	13
Emotional instability	1	4
Guilt due to surviving restructuring	. 1	4
Suicide	I	4
Victimhood	1	4
Frustration	1	4
Antisocial behaviour	1	4
	14	59
Physical Outcomes		
Occupational Overuse Syndrome	2	9
Sickness from burnout	1	4
Tiredness from long hours	1	4
	4	17
Organisational Outcomes		
High turnover	2	9
Absenteeism	1	4
Lack of leadership	1	4
	4	17
Social/Interpersonal Outcomes		
Domestic difficulties	1	4
	1	4

Sixty-eight percent of the Human Resource practitioners indicated that the problem of poor mental health in the workplace is serious enough to warrant intervention. Table 6 presents a content analysis summary of the respondents' justification to their responses concerning the seriousness of poor mental health in the workplace in terms of warranted intervention. The table shows the categories into which the Human Resource practitioners' perceptions were coded.

Table 6

Categories of the respondents' perceptions of the seriousness of poor mental health in the workplace in terms of warranted intervention

Frequency	% of category
41	42
31	32
15	15
10	10
4	4
4	4
3	3
14	61
9	39
2	9
e is serious	enough to warrant
e is not seri	ious enough to

NO = The problem of poor mental health in the workplace is not serious enough to warrant intervention

Of those Human Resource practitioners responding that the problem of poor mental health in the workplace is serious enough to warrant intervention, the following justifications were characterised by higher percentages:

- · Poor mental health impacts upon organisational efficiency and performance;
- Poor mental health is serious enough to warrant reactive intervention. That
 is, interventions that are aimed at treating employees in distress.

The justifications characterised by higher percentages of respondents who indicated that the problem of poor mental health in the workplace is not serious enough to warrant intervention were as follows:

It is sufficient to deal with mental health issues in the workplace reactively.
 That is, on a case-by-case basis to treat employees in distress;

 The issue of poor mental health in the workplace is not sufficiently serious to address and therefore does not warrant intervention.

Table 7 presents a content analysis summary of the respondents' perceptions of the most appropriate person/s to intervene and address workplace mental health issues and shows the categories into which their perceptions were coded.

As shown in Table 7, general management and human resource management were perceived by the respondents as being the most appropriate intervenors to address workplace mental health issues within an organisation. Outsourcing of external, trained occupational health professionals was also characterised by a high percentage and represented the use of intervenors outside of an organisation to address workplace mental health issues.

Seventy-three percent of the Human Resource practitioners commented on contributions arising from a variety of combinations of the intervenors shown in Table 7.

The Perceived Impact of Work Factors and Non-Work Factors on Employee Mental Health

The frequencies and percentages of the Human Resource practitioners who perceived the Work Factors and the Non-Work Factors identified in the questionnaire as having a high or very high impact on employee mental health were combined and calculated.

The Work Factors and Non-Work Factors shown in Tables 8 and 9 respectively have been arranged in descending order of percentage with the highest percentages listed first. As a result, the two tables show the individual Work Factors and Non-Work Factors that were perceived by various percentages of the respondents as having a high or very high impact on employee mental health.

Table 7

<u>Categories of respondents' perceptions of the most appropriate person/s to intervene and address workplace mental health issues (n=152)</u>

Ca	itegory	Frequency	%
1.	Management		
	• Senior	18	12
	• General	82	54
	• Human Resource	70	46
2.	Outsourcing of external, trained occupational health professionals	68	45
3.	Trained occupational health specialists within the organisation	24	16
4.	Employee Assistance staff	22	14
5.	Workplace chaplain	15	10
6.	Team members/work peers	10	7
7.	Government departments	8	5
8.	Individual responsibility	7	5
9.	Unions	3	2

The factors shown in Tables 8 and 9 were divided into three equally spaced clusters, representing 'high', 'medium' and 'low' as follows:

- Cluster 1: Work Factors and Non-Work Factors that were perceived by 68%+ of the respondents as having a high or very high impact on employee mental health.
- Cluster 2: Work Factors and Non-Work Factors that were perceived by 34-67% of the respondents as having a high or very high impact on employee mental health.
- Cluster 3: Work Factors and Non-Work Factors that were perceived by 0-33% of the respondents as having a high or very high impact on employee mental health.

Table 8

Percentages of Human Resource practitioners who perceive Work Factors as having a high or very high impact on employee mental health (n=164)

Work Factor	Frequency	%
Factors intrinsic to the job		
Work overload	145	88
Employee-job fit	118	72
Physical work danger	102	62
Job satisfaction	102	62
Shiftwork	91	55
Poor physical working conditions	88	54
Work underload	68	42
Technological change at work	66	40
Lack of task variety	49	30
Role in the organisation		
Role conflict	125	76
Organisational conflict	107	65
Role ambiguity	100	61
Lack of control over work	91	56
Responsibility for employees	54	33
Lack of autonomy	52	32
Career development	121	90
Organisational restructuring	131	80
Job insecurity	119	73
Overpromotion	106	65
Inadequate training	91	56
Underpromotion	56	34
Lack of job mobility	44	27
Lack of pay advancement prospects	40	24
Relationships at work		
Ineffective interpersonal work relations	105	64
Conflict between employee and organisational values	103	63
Ineffective group processes	64	39
Lack of social support from members of the organisation	54	33
Organisational structure and climate		
Organisational change	124	76
Lack of feedback and recognition	106	64
Office politics	75	46
Lack of participation in decision making process	67	41
Unclear organisational structure	60	37
oncical organisational structure	00	3/

Table 9

Percentages of Human Resource practitioners who perceive Non-Work Factors
as having a high or very high impact on occupational mental health (n=164)

Non-Work Factor	Frequency	%
Family problems	148	90
Divorce/separation	145	88
Financial problems	142	87
Bereavement	126	77
Individual coping ability	126	77
Bringing work stress into the home environment	111	68
Immigration	79	48
Lack of family support	74	45
Dual career stress (both partners working)	59	36

Table 10 shows the results of the clustering of Work and Non-Work Factors.

As shown in Table 10, the clustering of the Work Factors did not demonstrate any consistent trend. The highest number of Work Factors were located in Cluster 2, suggesting that 34-67% of the respondents perceived most of the Work Factors as having a high or very high impact on employee mental health. The highest percentage of respondents (68%+) perceived only six of the Work Factors as having this impact on employee mental health.

The clustering of the Non-Work Factors suggested that as the number of Non-Work Factors in each cluster decreased, there was a corresponding decrease in the percentage of respondents perceiving these Non-Work Factors as having a high or very high impact on employee mental health. Therefore, the highest percentage of the respondents (68%+) perceived most of the Non-Work Factors as having a high or very high impact on employee mental health.

When examining the clustering of both the Work and Non-Work Factors, the factors that were perceived by the highest percentage of the Human Resource practitioners (68%+) as having a high or very high impact on employee mental health included the following: work overload, employee-job fit, role conflict, organisational restructuring, job insecurity, organisational change, financial

problems, family problems, divorce/separation, bereavement, individual coping ability and bringing work stress into the home environment.

Table 10

Clustering of Work Factors and Non-Work Factors according to percentages of respondents who perceive these factors as having a high or very high impact on employee mental health

Cluster 1 (68%+)	Cluster 2 (34-67%)	Cluster 3 (0-33%)
Work Factors		
Work overload	Physical work danger	Lack of task variety
Employee-job fit	Job satisfaction	Lack of autonomy
Role conflict	Shiftwork	Responsibility for employees
Organisational restructuring	Physical working conditions	Lack of job mobility
Job insecurity	Work underload	Lack of pay advancement
Organisational change	Technological change at work	prospects
	Organisational conflict	Lack of social support
	Role ambiguity	
	Lack of control over work	
	Overpromotion	
	Inadequate training	
	Underpromotion	
	Conflict between employee	
	and organisational values	
	Ineffective interpersonal work	
	relations	
	Ineffective group processes	
	Lack of feedback and recognition	
	Office politics	
	Lack of participation in decision	
	making process	
	Unclear organisational structure	
Non-Work Factors		
Financial problems	Immigration	
Family problems	Lack of family support	
Divorce/separation	Dual career stress	
Bereavement	(both partners working)	
Individual coping ability		
Bringing work stress home		

The Perceived Impact of Poor Employee Mental Health on Organisational Outcomes and Individual Outcomes

The frequencies and percentages of the Human Resource practitioners who perceived poor employee mental health as having a high or very high impact on the Organisational Outcomes and Individual Outcomes identified in the questionnaire were combined and calculated.

The Organisational Outcomes and Individual Outcomes shown in Table 11 have been arranged in descending order with the highest percentages listed first. The table therefore shows how poor employee mental health was perceived by various percentages of the respondents as having a high or very high impact on certain Organisational Outcomes and Individual Outcomes.

The same clustering procedure was applied to the Organisational and Individual Outcomes shown in Table 11.

As shown in Table 12, the clustering of the Organisational Outcomes suggested that as the number of Organisational Outcomes in each cluster increased, there was a decrease in the percentage of the respondents perceiving poor employee mental health as having a high or very high impact on these Outcomes. The highest percentage of the respondents (68%+) perceived poor employee mental health as having a high and very high impact on only one of the Organisational Outcomes.

The clustering of the Individual Outcomes suggested that as the number of Individual Outcomes in each cluster decreased, there was a corresponding decrease in the percentage of the respondents perceiving poor employee mental health as having a high or very high impact on these Outcomes. Therefore, the highest percentage of the respondents (68+%) perceived poor employee mental health as having a high or very high impact on most of the Individual Outcomes.

Table 11

Percentages of Human Resource practitioners who perceive poor employee mental health as having a high or very high impact on Organisational Outcomes and Individual Outcomes (n=164)

Outcomes	Frequency	%
Organisational Outcomes		
Productivity quality	120	73
Productivity quantity	109	66
Absenteeism	109	66
Interpersonal relations at work	99	60
Turnover	90	55
Group processes	83	51
Work accidents	63	38
Individual Outcomes		
Morale	134	82
Productivity	130	79
Efficiency	130	79
Coping ability	130	79
Interpersonal relations skills	123	75
Decision making ability	119	73
Creativity	118	72
Job satisfaction	110	67
Work commitment	110	67
Physical health	106	64
Ability to co-operate	106	64

When examining the clustering of both the Organisational Outcomes and Individual Outcomes, poor employee mental health was perceived by the highest percentage of the Human Resource practitioners (68%+) as having a high or very high impact on the following outcomes: organisational productivity quality, individual morale, individual productivity, individual efficiency, interpersonal relations skills, individual coping ability, individual creativity and individual decision making ability.

Table 12

<u>Clustering of respondents' perceptions of poor employee mental health as having</u>

<u>a high or very high impact on Organisational Outcomes and Individual Outcomes</u>

Cluster 1 (68%+)	Cluster 2 (34-67%)	Cluster 3 (0-33%)
Organisational Outcomes		
Productivity quality	Productivity quantity	
	Absenteeism	
	Interpersonal relations at work	
	Turnover	
	Group processes	
	Work accidents	
Individual Outcomes		
Morale	Job satisfaction	
Productivity	Work commitment	
Efficiency	Physical health	
Interpersonal relations skills	Ability to co-operate	
Coping ability		
Creativity		
Decision making ability		

The Implementation of Interventions Addressing Occupational Mental Health <u>Issues</u>

Table 13 shows the Primary, Secondary and Tertiary Interventions that have been implemented in the organisations in which the respondents work. The implemented interventions under each sub-heading in the table have been placed in descending order with the highest percentages listed first.

As shown in Table 13, a high percentage of the Human Resource practitioners indicated that the Primary Interventions identified in the questionnaire had been implemented in their organisations. The alteration of physical working conditions and employee involvement in career development were the most commonly implemented Primary Interventions. The provision of social support and feedback was not as popular in relation to the other Primary Interventions in terms of workplace implementation.

Practical training programmes were the most commonly implemented Secondary Interventions. Higher percentages of the Human Resource practitioners indicated that stress management training, goal setting and interpersonal skills training had been implemented in their organisations. Education programmes on anxiety, alcohol abuse, chemical dependency, depression and mental well-being in general were characterised by the lowest percentages, suggesting that these Secondary Interventions were the least popular interventions in terms of implementation. It is interesting to note the relationship between the perceived prevalence of the various outcomes (see Table 6) and the implementation of the various Secondary Interventions.

As shown in Table 13, a high percentage of the Human Resource practitioners indicated that Employee Assistance Programmes, in-house counseling and consultation arrangements with outside mental health providers were implemented in the organisations in which they work. Cognitive counseling approaches were not as popular in relation to the other Tertiary Interventions in terms of workplace implementation.

Overall, the most commonly implemented interventions in the organisations in which the respondents work were as follows:

- Employee Assistance Programmes (Tertiary Intervention),
- Alteration of physical working conditions (Primary Intervention),
- Employee involvement in career development (Primary Intervention),
- Stress management training (Secondary Intervention).

The content analysis of the 'other (please specify)' category included in the question concerning the implementation of various interventions in the respondents' organisations was characterised by numerous categories, many of which had frequencies of one. Appendix D shows these categories in terms of additional Secondary and Tertiary Interventions that have been implemented in the organisations in which the Human Resource practitioners work.

Table 13

Primary, Secondary and Tertiary Interventions that have been implemented in the organisations in which the respondents work (n=164)

Intervention	Frequency	%
Primary Interventions		
Alteration of physical working conditions	108	66
Employee involvement in career development	104	63
Changes in organisational structure	96	59
Job redesign	97	59
Encouragement of participative management	96	59
Revision of selection and placement procedures	94	57
Establishment of flexible work schedules	92	56
Provision of social support and feedback	71	43
Secondary Interventions		
Stress management training	102	62
Goal setting	99	60
Interpersonal skills training	97	59
Problem solving training	72	44
Exercise programme	54	33
Relaxation techniques training	41	25
Education programmes on anxiety	35	21
Education programmes on alcohol abuse	25	15
Education programmes on chemical dependency	22	13
Education programmes on mental well-being in general	17	10
Education programmes on depression	15	9
Tertiary Interventions		
Employee assistance programme	112	68
In-house counseling	88	54
Consultation arrangements with outside mental health		
providers	86	52
Cognitive counseling approaches	32	20

The mean percentages for the Primary, Secondary and Tertiary Interventions suggested that on average, the Primary Interventions (mean=58%) were the most commonly implemented interventions in the respondents' organisations, followed by the Tertiary Interventions (mean=49%). The

Secondary Interventions (mean=32%) were on average the least common group of interventions implemented.

Table 14

Primary, Secondary and Tertiary Interventions, showing corresponding sample sizes, that respondents would consider implementing in the future

Intervention	n	Frequency	%	
Primary Interventions				
Employee involvement in career development	54	11	20	
Encouragement of participative management	62	10	16	
Job redesign	61	10	16	
Alteration of physical working conditions	50	8	16	
Revision of selection and placement procedures	64	9	14	
Establishment of flexible work schedules	66	9	14	
Changes in organisational structure	62	5	8	
Provision of social support and feedback	86	7	8	
Secondary Interventions				
Stress management training	58	13	22	
Goal setting	61	12	20	
Interpersonal skills training	63	12	19	
Education programmes on anxiety	125	18	14	
Problem solving training	88	11	13	
Education programmes on mental well-being in general	143	19	13	
Relaxation techniques training	119	14	12	
Exercise programme	106	12	11	
Education programmes on alcohol abuse	135	13	10	
Education programmes on chemical dependency	138	12	9	
Tertiary Interventions				
Employee assistance programme	48	14	29	
Consultation arrangements with outside mental health				
providers	74	11	15	
In-house counseling	72	5	7	
Cognitive counseling approaches	127	6	5	

Notes. The sample size (n) shown for each intervention refers to the number of respondents who indicated that the Primary, Secondary and Tertiary Interventions identified in the questionnaire had never been implemented in the organisations in which they work. The slight deviations in the individual sample sizes shown in this table and Table 13 (n=164) are the result of missing values.

The interventions that respondents' would consider implementing in the future, as shown in Table 14, have been placed in descending order under each sub-heading with the highest percentages listed first, taking into account the differing sample sizes.

From the percentages shown in Table 14, it may be concluded that low percentages of the respondents who indicated that these interventions had never been implemented in the organisations in which they work, would consider implementing these interventions to address occupational mental health issues in the future. However, the higher percentages suggested that these Human Resource practitioners would consider implementing the following interventions ahead of the remaining interventions that were identified in the questionnaire:

- Employee Assistance Programmes (Tertiary Intervention),
- · Stress management training (Secondary Intervention),
- · Goal setting (Secondary Intervention),
- Employee involvement in career development (Primary Intervention).

Table 15 shows the organisational levels that generally have access to Secondary and Tertiary Interventions that have already been implemented in the respondents' organisations. The sample size for the table excludes those Human Resource practitioners who indicated that none of these interventions had been implemented in their organisations. As shown in Table 15, all levels of the organisation have generally had access to these implemented interventions.

The response percentages were similar for operating employees, first line supervisors, middle management and full-time employees (76-81%). Top level management and part-time employees have generally had less access to the implemented interventions.

Table 15

Organisational levels that generally have access to Secondary and Tertiary

Interventions (n=134)

Organisational level	el Frequency		
Operating level employees	128	78	
First line managers	124	76	
Middle management	124	76	
Top level management	. 113	69	
Full-time employees	132	81	
Part-time employees	102	62	

Note. Those respondents who indicated that the secondary and tertiary interventions outlined in the questionnaire had never been implemented in the organisations in which they work were excluded.

Table 16 presents a content analysis of the 'other (please specify)' category that was included in the question concerning the levels of the organisation that generally have had access to already implemented interventions.

Table 16

Groups of individuals who have had access to already implemented interventions
(n=5)

Category	Frequency	%
Contractual staff	3	60
Family members of staff	ĺ	20
Volunteers	1	20
	5	100

Table 17 presents a content analysis summary of the justification given by respondents as to why any of the Primary, Secondary and Tertiary Interventions outlined in the questionnaire had not been implemented in the organisations in which they work. The table shows the categories into which the respondents' responses were coded.

Table 17

Categories of respondents' justification as to why any of the Primary, Secondary and Tertiary Interventions had never been implemented in the organisations in which they work

Category	Frequency	% of category
Primary Interventions (n=55)		
No apparent need	12	22
2. Not appropriate to organisation/s	10	18
3. Lack of available time and resources	9	16
4. Not implemented for the purpose of addressing mental		
health issues	9	16
5. Not a priority	9	16
6. No clear justification of benefits vs. costs	7	13
7. Lack of management support	4	7
8. Other		
 Due to organisational change and restructuring 	2	4
• Reactive rather than proactive approach followed	1	2
• People fit the organisation and not vice versa	1	2
Secondary and Tertiary Interventions (n=102)		
1. No apparent need	35	34
2. Lack of available time and resources	27	26
3. No clear justification of benefits vs. costs	16	16
4. Not appropriate to organisation	15	15
5. Not a priority	10	10
6. Employee Assistance Programmes sufficient to address		
mental health issues	9	9
7. Energies directed into other processes/interventions	6	6
8. Lack of ownership of the problem	6	6
9. Reactive approach sufficient	6	6
10. Individual's responsibility	6	6
11. Organisation as referral agent only	6	6
12. Other		
· Lack of management support	4	4
· Lack of concern for employee welfare	3	3
• Interventions would not be used	1	1

Table 17 is divided into two groups of categories. The first group of categories correspond with the respondents' justification concerning the Primary Interventions. The second group of categories correspond with the respondents' justification concerning the Secondary and Tertiary Interventions.

The justifications characterised by higher percentages of respondents as to why any of the Primary Interventions had not been implemented in the organisations in which they work were as follows:

- · No apparent need;
- Primary Interventions not appropriate to the organisation/s.

The justifications characterised by higher percentages of respondents as to why any of the Secondary and Tertiary Interventions had not been implemented in the organisations in which they work were as follows:

- No apparent need;
- Lack of available time and resources (both monetary and appropriate knowledge).

The Perceived Effectiveness of Interventions Addressing Occupational Mental Health Issues

The frequencies and percentages of the Human Resource practitioners who perceived the Primary, Secondary and Tertiary Interventions as being effective or very effective in terms of addressing occupational mental health issues were combined and calculated.

The Primary, Secondary and Tertiary Interventions under each respective sub-heading in Table 18 have been arranged in descending order with the highest percentages listed first. As a result, the table shows the Primary, Secondary and Tertiary Interventions that were perceived by higher percentages of the respondents as being effective or very effective in addressing occupational mental health issues.

As shown in Table 18, there was a reasonable amount of variation in the percentage distributions for the various intervention. It is interesting to note the similarities and differences between the table illustrating the implementation of

various interventions (Table 13) and the perceptions of intervention effectiveness as shown in Table 18.

The clustering procedure described previously, was applied to the Primary, Secondary and Tertiary Interventions shown in Table 18.

Table 19 shows the results of the clustering of Primary, Secondary and Tertiary Interventions according to the percentages of respondents who perceive these interventions as being effective or very effective in addressing occupational mental health issues.

As shown in Table 19, the highest number of Primary Interventions were located in Cluster 2, suggesting that 34-67% of the respondents perceived most of the Primary Interventions as being effective or very effective in addressing occupational mental health issues. The lowest percentage of the respondents (0-33%) perceived only one of the Primary Interventions as being effective or very effective in addressing occupational mental health issues.

The highest number of Secondary Interventions were located in Cluster 3, suggesting that 0-33% of the respondents perceived most of the Secondary Interventions as being effective or very effective in addressing occupational mental health issues. It is interesting to note that the education programmes on various occupational mental health issues were all located in Cluster 3.

The highest number of the Tertiary Interventions were located in Cluster 2, suggesting that 34-67% of the respondents perceived most of these interventions as being effective or very effective in addressing occupational mental health issues. The lowest percentage of respondents (0-33%) perceived only one of the Tertiary Interventions as being effective or very effective in addressing occupational mental health issues.

Percentages of respondents who perceive Primary, Secondary and Tertiary

Interventions as being effective or very effective in addressing occupational mental health issues (n=164)

Interventions	Frequency	%
Primary Interventions		
Encouragement of participative management	95	58
Employee involvement in career development	72	56
Establishment of flexible work schedules	88	54
Job redesign	85	52
Alteration of physical working conditions	84	51
Revision of selection and placement procedures	71	43
Provision of social support and feedback	71	43
Changes in organisational structure	47	29
Secondary Interventions		
Interpersonal skills training	97	59
Goal setting	93	57
Stress management training	84	51
Problem solving training	71	43
Relaxation techniques training	53	32
Exercise programme	49	30
Education programmes on anxiety	32	20
Education programmes on mental well-being		
in general	27	17
Education programmes on chemical dependency	26	16
Education programmes on alcohol abuse	25	15
Education programmes on depression	20	12
Tertiary Interventions		
Employee assistance programmes	101	62
Consultation arrangements with outside		
mental health providers	84	51
In-house counseling	79	48
Cognitive counseling approaches	36	22

Table 19

<u>Clustering of Primary, Secondary and Tertiary Interventions according to percentages of respondents who perceive these interventions as being effective or very effective in addressing occupational mental health issues</u>

Cluster 1 (68%+)	Cluster 2 (34-67%)	Cluster 3 (0-33%)
Primary Interventions		
	 Encouragement of participative 	· Changes in
	management	organisational structure
	 Employee involvement in 	
	career development	
	 Establishment of flexible work 	
	schedules	
	• Job redesign	
	 Alteration of physical working 	
	conditions	
	 Revision of selection and 	
	placement procedures	
	 Provision of social support 	
	and feedback	
Secondary Interventions		
	 Interpersonal skills training 	 Relaxation techniques
	• Goal setting	training
	 Stress management training 	• Exercise programme
		 Education programmes
		on:
		Anxiety
		Alcohol abuse
		Chemical dependency
		General mental wellbeing
		Depression
Tertiary Interventions		
	• Employee assistance	 Cognitive counseling
	Programmes	approaches
	• Consultation arrangements with	
	outside mental health providers	
	• In-house counseling	

The interventions that were perceived by the highest percentage of the Human Resource practitioners (34-67%) as being effective or very effective in terms of addressing occupational mental health issues included the following: encouragement of participative management, employee involvement in career development, job redesign, alteration of physical working conditions, establishment of flexible work schedules, revision of selection and placement procedures, provision of social support and feedback, goal setting, interpersonal skills training, stress management training, employee assistance programmes and consultation arrangements with outside mental health providers.

It is interesting to note the interventions that were perceived by higher percentages of the respondents as being effective or very effective in relation to the implementation of the various Primary, Secondary and Tertiary Interventions (see Table 13).

The responses to the question concerning which intervention category (Primary, Secondary or Tertiary) the Human Resource practitioners perceived as being most effective in terms of addressing occupational mental health were examined. An average response for each intervention category was computed. This average was based on the scale of one (most effective) to five (least effective) that was provided in the questionnaire (see Appendix A, Section 4, Question 17).

The minimum and maximum values indicated that for each intervention category, there was a wide range of responses (from 1.0 to 5.0, or in other words from 'most effective' to 'least effective'). The means across the three intervention categories ranged from 2.0 to 2.4, indicating that a high percentage of the respondents perceived all three intervention categories as tending towards the 'most effective' category. The means for the Secondary Intervention category (mean=2.0) and the Primary Intervention category (mean=2.1) were not significantly different and it was therefore difficult to justify a distinction between them. The mean for the category concerning interventions aimed at treating employees in distress (i.e. Tertiary Intervention, mean=2.4) suggested that this intervention category was perceived as being slightly less effective in relation to the other intervention categories in addressing occupational mental health issues.

Averages of the percentages of the sample who perceived the various Primary, Secondary and Tertiary Interventions as being effective or very effective in addressing workplace mental health issues were calculated. The highest average (48%) of the respondents perceived the Primary Interventions as being the effective or very effective. An average of 46% of the Human Resource practitioners perceived the Tertiary Interventions as being effective or very effective in addressing workplace mental health issues. The lowest average percentage (32%) of the sample perceived the Secondary interventions as being effective or very effective.

It is interesting to note the similarities between the average percentages of perceived intervention effectiveness in relation to the mean percentages for the implementation of the Primary, Secondary and Tertiary Interventions.

Table 20 presents a content analysis summary of the respondents' comments concerning additional interventions not identified in the questionnaire that they perceived as being effective in addressing occupational mental health issues.

As shown in Table 20, the higher percentages indicated that the Human Resource practitioners perceived the following interventions as effective in addressing occupational mental health issues:

- Management taking responsibility for the recognition of mental health issues in the workplace and implementing appropriate interventions to address such issues;
- · Empowering employees within the organisation;
- Proactive interventions aimed at preventing distress in the workplace rather than merely concentrating on reactive interventions aimed at treating employees already in distress.

Employee Assistance Programme Service Surveys

Sixty percent of the Human Resource practitioners indicated that they perceived surveys to ascertain perceived employee needs for employee assistance programme services as a worthwhile exercise. Sixty-one percent indicated that such surveys had never been implemented in the organisations in which they work. Table 21 presents a summary of the content analysis of the justification

given by respondents to the question concerning the worthwhile nature of surveys to ascertain employee needs for Employee Assistance Programme services. The categories into which the respondents' comments were coded are shown in Table 21.

Table 20

<u>Categories of additional interventions that respondents' perceive as effective in addressing occupational mental health issues (n=36)</u>

Category	Frequency	%
Management taking responsibility for recognition and		
and appropriate intervention implementation	13	36
2. Employee empowerment	5	14
3. Proactive interventions aimed at preventing distress	5	14
4. Organisational strategies		
• Effective communication strategies	4	11
• Ensuring employee-job fit	2	6
• Time out when required	2	6
• Realistic work loads	1	3
• Job clarity	1	3
• Addressing poor performance and recognising good performance	1	3
 Caring for the organisations most important asset 	1	3
5. Specific interventions		
• Team building and development	4	11
• Time management workshops	2	6
· Occupational mental health awareness workshops	1	3
• Career counseling	1	3
Workplace chaplaincy service	1	3
Change management workshops	1	3
Best practice workshops	1	3
Victim support counseling	1	3
6. Home:work boundary		
• Liasing with family	4	11
• Recreational and social activities	1	3
7. Other	3	8

Table 21

<u>Categories of respondents' perceptions of the worthwhile nature of surveys to ascertain employee needs for Employee Assistance Programme services</u>

Category	Frequency	% of category
YES (n=71)		
1. Identification of employee needs which can be targeted		
by appropriate interventions	35	49
2. Vehicle for communication and feedback between employer		
and employees	12	17
3. Helpful in raising awareness of problems not evident to		
the organisation	5	7
4. Reflection of interest in employee involvement	5	7
5. Justification for expenditure involved in interventions	4	6
5. If positive action is an outcome	4	6
7. Provided insight into the causes of poor mental health	3	4
8. Information is more worthwhile than no information	3	4
9. Other		
• Employee 'buy in' required for success	2	3
• Highly dependent on questionnaire design	1	1
• Only as a means of comparing change in climate between		I
surveys	1	1
NO (n=45)		
1. Scepticism surrounding survey rationale and effectiveness	15	33
2. Individual lack of acknowledgement of the need for help	11	24
3. Raises expectations that changes for the better may result	6	13
4. Difficult in employee ability to foresee type of assistance		
required	5	11
5. Employee Assistance services should be available regardless		
of perceived need	4	9
6. Personal approach more effective	3	7
7. Other		
• Employee Assistance services not required by employees	1	2
• Employees respond in a manner they believe management wants	1	2
• Generation of negative reaction from those not needing help	1	2
	1	2
 Employer should be responsible for not creating problems 		-

Note. YES = Surveys to ascertain perceived employee needs for EAP services is a worthwhile exercise

NO = Surveys to ascertain perceived employee needs for EAP services is not a worthwhile exercise

Of those Human Resource practitioners responding that surveys to ascertain employee needs for Employee Assistance Programme services is a worthwhile exercise, the following justifications were characterised by higher percentages:

- Surveys would aid in the identification of employee needs which can then be targeted by the implementation of appropriate interventions;
- Surveys constitute a vehicle for communication and allow for feedback between employer and employees.

Justifications characterised by higher percentages of respondents who responded that surveys to ascertain perceived employee needs for Employee Assistance Programme services is not a worthwhile exercise were as follows:

- Scepticism surrounding the rationale for implementing such a survey and its
 effectiveness in terms of level of accuracy and resultant outcomes;
- Individuals in distress often do not acknowledge the need for help.

Human Resource Practitioners' Perceived Ability to Address Occupational Mental Health Issues

Forty-eight percent of the respondents indicated that they were equipped as Human Resource practitioners to address workplace mental health issues. Forty-five percent of the respondents indicated that they were not equipped to address workplace mental health issues.

Table 22 presents a summary of the content analysis of the respondents' perceptions of their ability as Human Resource practitioners to address occupational mental health issues.

Of those Human Resource practitioners who responded that they are equipped to address the occupational mental health issues raised in the questionnaire, the following justifications were characterised by the higher percentages:

 Equipped to address such issues as a member of a team alongside other specialists and referral agencies; Equipped to address occupational mental health issues as a result of wide knowledge and experience of workplace stress and related issues.

The justifications characterised by the higher percentages of Human Resource practitioners responding that they are not equipped to address the occupational mental health issues that were raised in the questionnaire were as follows:

- · Lack of specific training in occupational mental health issues;
- Not equipped to address such issues as a Human Resource practitioner as specialist expertise is required to deal with mental health issues in the workplace.

Table 23 presents a summary of the content analysis of the respondents' comments concerning the training that would equip them as Human Resource practitioners to address occupational mental health issues and shows the categories into which their comments were coded.

As shown in Table 23, the respondents perceived that training in the recognition of the signs and symptoms of poor mental health in the workplace and appropriate intervention implementation would equip them as Human Resource practitioners to address occupational mental health issues. Specialist courses addressing individual mental health topics as well as specific training programmes were also perceived by the Human Resource practitioners as being beneficial in equipping them to address occupational mental health issues.

Table 22

<u>Categories of the Human Resource practitioners' perceptions of their ability to address occupational mental health issues</u>

Category	Frequency	% of category								
YES (n=67)										
1. As a team member alongside other specialists										
and referral agencies	32	48								
2. Wide knowledge/experience of workplace stress	25	37								
3. Qualified in addressing occupational mental health issues	9	13								
4. Development of systems and policies if and when required	5	7								
5. Limited	4	6								
6. Can be treated on a case by case basis	1	1								
NO (n=54)										
1. Lack of specific training in area	21	39								
2. Specialist expertise required	16	30								
3. Occupational mental health not regarded as a high priority	6	11								
4. Specialist area of HR - not area of responsibility	5	9								
5. Recognition and referral sufficient	3	6								
6. Organisations have appropriate systems in place	3	6								
7. Lack of experience in addressing issues	3	6								
8. Other										
 Unrealistic for management to address 	2	4								
• Individual's responsibility	1	2								
• Favour organisation rather than employees	1	2								

Note. YES = Equipped as a Human Resource practitioner to address occupational mental health issues

NO = Not equipped as a Human Resource practitioner to address occupational mental health issues

Table 23

<u>Categories of Human Resource practitioners' comments on training that would</u>

<u>equip them to address occupational mental health issues (n=111)</u>

Ca	legory	Frequency	%
1.	Training in the recognition of signs/symptoms of poor		
	mental health and appropriate effective intervention	48	43
2.	Specialist courses addressing individual mental health topics	13	12
3.	Don't know	11	10
4.	Not required to address these occupational mental health issues	10	9
5.	Qualification and practical experience in occupational mental		
	health	6	5
6.	Access to relevant research	4	4
7.	Understanding of organisational psychology	4	4
8.	Specific training programmes		
	• Counselor training	11	10
	• Training on developing an occupational mental health policy	3	3
	• Group facilitation training	2	2
	• On the job training	1	1
	• Practical training on implementation	1	1
	• Communication skills training	1	1
	• Performance coaching	1	1
	• Training as a trainer	1	1
	• Training HR practitioners to provide support and referral	1	1
9.	Outsourcing		
	• Training on what external resources would be required and		
	how referral should be made	9	8
	• Up-to-date NZ directories of qualified specialist support		
	services	2	2
10	Other		
	• Update on current policies/practices	3	3
	• Anything	2	2
	• Unlikely that an individual could be trained in all issues	2	2
	• Life experience	1	1

Eight composite variables were computed. The variables in Section 2 of the questionnaire (see Appendix A) concerning the impact of Work Factors on employee mental health contributed to five composite variables, namely: Factors intrinsic to the job; Role in the organisation; Career development; Relationships at work and Organisational structure and climate. The variables concerning the impact of Non-Work Factors on employee mental health contributed to one composite variable namely; Individual Non-Work Causes.

The variables in Section 3 of the questionnaire concerning the impact of poor employee mental health on Organisational Outcomes and Individual Outcomes contributed to the composite variables of Organisational Outcomes and Individual Outcomes respectively.

An average response for each composite variable was computed. This average was based on the scale of one (very high impact) to five (no impact) that was provided in the questionnaire. The responses were averaged because there were a different number of items contributing to each composite variable, thus averaging ensured that the composite variables were comparable. Only those respondents who answered all of the items contributing to a composite variable contributed to the relevant average. Thus, the effective sample size varies across the eight composite variables.

Table 24 shows the composite variables with their corresponding sample sizes, minimum and maximum values, means and standard deviations. The sample sizes for the composite variables indicated that a minimum of 90% and a maximum of 98% of the sample was retained for the individual composite variables.

The minimum and maximum values indicated that for each composite variable, there was a wide range of responses (from 1.0 to 4.7, or in other words from 'very high impact' to almost 'no impact'). However, the standard deviations suggested that few values were situated at these extremes.

The means across the first five composite variables remained consistent at 2.4-2.5. These composite scores constituted sub-parts of the question concerning the impact of Work Factors on employee mental health (see Appendix A, Section 2, Question 5). This suggested that the individual

respondents showed similar responses on these composite variables. The means indicated that on average, the responses to the question concerning the impact of Work Factors on employee mental health fell between the response categories of 'high impact' and 'moderate impact'.

Table 24

Sample sizes, minimums, maximums, means and standard deviations for composite variables

Variable	n	Minimum	Maximum	Mean	Std Dev
Factors intrinsic to the job	156	1.0	4.3	2.4	0.6
Role in the organisation	158	1.0	4.7	2.5	0.6
Career development	160	1.0	5.0	2.5	0.6
Relationships at work	158	1.0	4.5	2.5	0.7
Organisational structure & climate	159	1.0	4.6	2.5	0.7
Individual non-work causes	148	1.0	4.4	2.1	0.5
Organisational outcomes	156	1.0	4.3	2.4	0.8
Individual outcomes	160	1.0	4.0	2.0	0.6

As shown in Table 24, the mean for the composite variable Individual Non-Work Causes indicated that on average, the responses to the question concerning the impact of Non-Work Factors on mental health tended towards the response category of 'high impact'. The Human Resource practitioners therefore generally perceived Individual Non-Work Factors as having slightly more of an impact on mental health in relation to the Work Factors.

The mean for the composite variable Organisational Outcomes indicated that on average, the responses to the question concerning the impact of poor mental health on Organisational Outcomes fell between the response categories of 'high impact' and 'moderate impact'. The mean for the composite variable Individual Outcomes indicated that on average, the responses to the question concerning the impact of poor mental health on Individual Outcomes fell under the response category of 'high impact'. The respondents therefore generally perceived poor employee mental health as having slightly more of an impact on Individual Outcomes in relation to the Organisational Outcomes.

Relationships Between Composite Variables

A correlation analysis was conducted in order to determine the relationships between the composite variables. Table 25 shows the Pearson Product Momement correlations between the composite variables. The table also shows the sample sizes. All correlations were significant at $\alpha = .01$.

As shown in Table 25, there were high correlations (r = .59 to .76) between the composite variables concerning the impact of work factors on employee mental health (i.e. Factors intrinsic to the job, Role in the organisation, Career development, Relationships at work, Organisational structure and climate). According to the effect size definitions provided by Cohen (1992), these correlations display a large effect size (r > .50). The correlation between the composite variables concerning the impact of poor employee mental health on Organisational Outcomes and Individual Outcomes (i.e., Organisational Outcomes and Individual Outcomes) was .59, displaying a large effect size (r > .50).

As can be seen in Table 25, the correlations between the Work Factors and the Non-Work Factors ranged from .47 to .55, displaying medium to large effect sizes (r = .30 to r > .50, see Cohen, 1992). The correlations between the Work and Non-Work factors and the Organisational Outcomes and Individual Outcomes ranged from .32 to .55, again displaying medium to large effect sizes (r = .30 to r > .50). These correlations indicated that the degree of relationship between the composite variables constituting various constructs were not as strong as the degree of relationship between composite variables constituting the same construct. The respondents' responses were therefore more consistent within constructs than between constructs.

Table 25

Pearson product momement correlations between composite variables and sample sizes

	Intrins	Org role	Career	Relation	Structur	Indnonw	Org out	Ind out
Intrins		.70	.76	.63	.61	.49	.43	.44
		153	154	152	153	144	150	155
Org role			.70	68	.64	.50	.39	.48
			156	154	156	145	152	156
Career				.59	.73	.55	.37	.46
				158	159	148	154	157
Relation					.67	.47	.37	.44
					157	146	152	155
Structur						.54	.32	.42
						147	153	156
Indnonw							.38	.55
							144	146
Org out								.59
								155
Ind out								

Notes. All correlations are significant at $\alpha = .01$

Intrins = Factors intrinsic to the job

Org role = Role in the organisation

Career = Career development

Relation = Relationships at work

Structur = Organisational structure and climate

Indnonw= Individual non-work causes

Org out = Organisational outcomes

Ind out = Individual outcomes

Inferential Statistics

Demographic Differences

A series of one-way between-subjects ANOVA's were conducted to examine possible differences in the eight composite variables as a function of each of the five main demographic variables (i.e. Gender, Age Group, Education Level, Tenure and Job Description). Table 26 shows the obtained F values for each of the composite variables. The F values with p<.01 have been highlighted in the table. The probability value was set at this level to minimise Type 1 error rates due to the high number of analyses conducted.

Table 26

ANOVA F values for each of the composite variables. Also shown are the degree's of freedom for each of the demographic variables

Variable	DF	Intrins	Org role	Career	Relation	Structur	Org out	Ind out	Indnonw
		(n=144)	(n=145)	(n=147)	(n=145)	(n=146)	(n=145)	(n=148)	(n=139)
Gender	1	3.51	2.46	10.66*	2.29	5.36	1.82	7.91*	3.27
Age group	3	1.51	0.34	0.38	0.59	0.15	1.02	1.82	1.35
Education	2	0.11	0.19	0.42	0.44	1.68	1.03	1.48	2.74
Tenure	3	1.07	0.29	0.29	0.02	0.14	0.42	1.12	0.35
Job	2	2.33	0.54	0.45	1.70	2.28	0.38	0.16	0.65

Notes. * p <.01

Gender = Includes the categories: 'Male', 'Female'

Age group = Includes the categories: '20-29 years', '30-39 years', '40-49 years', '50-69

years'

Education = Highest level of education achieved. Includes the categories: 'School',

'Undergraduate', 'Postgraduate'

Tenure = Length of practising time as a Human Resource Practitioner. Includes the

categories: 'Less than 5 years', '5-10 years', '11-20 years', '20+ years'

Job = Job description. Includes the categories: 'Internal Human Resource

Practitioner', 'External Human Resource Practitioner', 'Both'

As shown in Table 26, there were generally no consistent demographic differences in the composite variables. The only apparent differences related to gender. There were gender differences for the composite variables Career Development and Individual Outcomes.

Table 27 shows the mean composite variable (i.e., Career Development and Individual Outcomes) scores and standard deviations for males and females. The scores indicated that females generally scored lower than men, indicating that the females in the sample generally perceived career development to have more of an impact on mental health and poor mental health to have more impact on individual outcomes than did the male respondents.

Table 27

Mean composite variable scores and standard deviations for females and males

Variable	Career			Ind out		
	N	Mean	SD	N	Mean	SD
Female	86	2.35	0.52	87	1.90	0.56
Male	61	2.71	0.68	61	2.20	0.61

Demographic Cross-Tabulations

Cross-tabulations were done between the five main demographic variables (Gender, Age Group, Education Level, Tenure and Job Description) and various other variables which included the following:

- Thirteen variables concerning the impact of Work Factors on employee mental health.
- The variables concerning the impact of Non-Work Factors on employee mental health.
- The variables concerning the impact of poor employee mental health on Organisational Outcomes and Individual Outcomes respectively.

- The variable concerning the perceived prevalence of poor mental health in the New Zealand workplace.
- The variables concerning the perception of various psychological outcomes as problems in the workplace.
- The variable concerning surveys to ascertain perceived employee needs for employee assistance programme services.

In general, no consistent differences were found in the cross-tabulations as a function of the demographic variables. When examining the cross-tabulations, caution was taken to only consider those cross-tabulations that reflected a chi-square probability value of p < .01. The alpha level was set at this rigorous level due to the large number of cross-tabulations examined and the fact that responses across variables tended to be consistent.

Moderate differences (.001 < p < .045) were found in fifteen of the total 215 cross-tabulations (see Appendix E for the cross-tabulations illustrating moderate demographic differences) and included the following:

Gender Differences

Work and non-work stressors. A high percentage (90%) of the Human Resource practitioners perceived employee-job fit as having a moderate to very high impact on employee mental health. The females of the sample, however, perceived employee-job fit (p=.028) as having a slightly greater impact on employee mental health in relation to the males of the sample. Similarly, 67% of the respondents perceived immigration as having a moderate to high impact on employee mental health, however, the females of the sample perceived immigration (p=.001) as having a slightly greater impact on employee mental health than did the male respondents.

Individual outcomes. The female respondents perceived poor employee mental health as having a slightly greater impact on individual coping ability (p=.020). This demographic difference is marginal in that 79% of the sample, regardless of gender perceived poor employee health as having a high to very high impact on individual coping ability.

Age Group Differences

Work stressors. Ninety-three percent of the Human Resource practitioners perceived role conflict as having a moderate to very high impact on employee mental health. The responses of the respondents aged 20-29 years suggested that there was a greater difference of opinion amongst members of this age group concerning the impact of role conflict (p=.012) on employee mental health. The respondents aged 59-69 years perceived work overload (p=.017) as having slightly less of an impact on employee mental health in relation to the respondents aged 20-49 years. This demographic difference was however marginal as 90% of the male and female respondents perceived work overload as having a high to very high impact on employee mental health.

Organisational outcomes. The respondents aged 20-29 years and 50-69 years perceived poor employee mental health as having a slightly greater impact on absenteeism (p=.038).

The respondents aged 50-59 years perceived poor employee mental health as having slightly less of an impact on organisational turnover (p=.008) in relation to the respondents aged 20-49 years.

Job Description Differences

Work stressors. A high percentage (93%) of the Human Resource practitioners, regardless of job description perceived organisational conflict as having a moderate to very high impact on employee mental health. The 'both' category of Human Resource practitioners, however, perceived organisational conflict as having a slightly greater impact on employee mental health in relation to the Internal Human Resource practitioners and the External Human Resource practitioners.

Factor Analysis

A factor analysis was conducted on the sixteen items (Questions 21-36) that constituted Section Five of the questionnaire (see Appendix A). These items were included in an attempt to construct a scale that would measure perceptions towards occupational mental health.

The factor analysis revealed no clear breakpoint in the variance accounted for by individual factors, making for a less than parsimonious solution. In order to reduce the number of factors, only those factors with eigenvalues greater than one were retained to provide a description of the data set. As a result, four factors were retained. A varimax rotation was conducted in order to simplify the solution and thus improve its interpretability. Table 28 shows the eigenvalues (i.e. variances) and proportions of variance explained for the four factors retained following a varimax rotation. The table also shows the resulting factor loadings. Those factor loadings that were greater than .5 are highlighted in the table. The sample size shown in Table 28 is n=152, due to the fact that 12 respondents were lost as a result of missing values.

As shown in Table 28, the first factor accounted for 29% of the variance, however the percentage of variance accounted for by the remaining three factors ranged between ten percent and eight percent.

In an attempt to attribute meaning to the factors, only variables with factor loadings of .5 and above were interpreted. Labels were then assigned to three of the four factors, which were as follows: Factor 1 was characterised as 'the reciprocal relationship between employee mental health and organisational structure and outcomes'. Factor 2 was characterised as 'reactive versus proactive occupational mental health interventions'. Factor 4 was characterised as 'mental health and associated workplace stigma'. The third factor was not assigned a label as no explicit meaning could be derived from the interpretation of the variables with substantial factor loadings on this factor.

Eigenvalues and proportions of variance explained for the four Factors retained following a varimax rotation. Also shown are the resulting factor loadings (n=152)

	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue	4.69	1.61	1.32	1.32
Proportion	.29	.10	.09	.08
Variable				
v160	.04	.87*	03	08
v161	.29	.41	.38	.31
v162	.64*	.28	02	.09
v163	.69*	.18	06	03
v164	.70*	.05	.27	.24
v165	.61*	.16	05	.30
v166	.81*	.09	.14	.20
v167	.81*	05	.21	.23
v168	.46	.40	.04	05
v169	.62*	.09	.10	16
v170	.00	04	06	.90*
v171	.61*	.18	26	.05
v172	.27	.31	57*	.03
v173	.65*	.09	04	12
v174	.24	.41	.28	.32
v175	.16	.23	.74*	05

Note. * Factor loadings > .5

Further data would be required in order to reduce the number of variables to a smaller number of factors in the construction of a scale. The researcher however, did not feel confident that further analysis would render the solution significantly more parsimonious at this stage. The elimination or modification of those variables situated in Factor 1 that had factor loadings less than .5 would be a progressive step in an attempt to clean up the scale.

CHAPTER FIVE: DISCUSSION

The purpose of the present exploratory study was to develop an understanding of Human Resource practitioners' perceptions and practices concerning the topic of occupational mental health. As such, it represented an exploration into how Human Resource practitioners' perceptions and practices differ from those reported in the academic literature. The following chapter includes a discussion of the findings of the survey of mental health in the workplace, which was utilised as the present exploratory research tool, in relation to relevant organisational psychological literature. This discussion is articulated in terms of the research objectives that were developed for the study.

Objectives

Organisational Responsibility to Address Occupational Mental Health Issues

A significant percentage (94%) of the Human Resource practitioners studied perceived organisations as having a responsibility to address mental health issues. This is an encouraging finding when it is considered that mental health has been projected to be a mainstream occupational health concern within the next ten years (Tollestrup, 1994b). Additionally, psychological health issues are becoming increasingly important in the workplace (Bateman, 1996). This result is interesting in relation to the argument put forward by Williams (1994) that mental health issues represent an area which many organisations are reluctant to take responsibility to address. The high percentages of the Human Resource practitioners who perceived organisations as having a responsibility may not necessarily be in contrast to Williams' argument as this finding does not imply that organisations actually address workplace mental health issues.

The most commonly (45%) perceived reason proposed for organisational responsibility in addressing mental health issues centred around the perception that taking responsibility for such issues in the workplace constitutes a contribution to organisational efficiency in terms of productivity and organisational functioning. This perception corresponds with the growing realisation reflected in the literature that the good physical and mental health of

employees is in the best interest of organisations in that unhealthy employees are less productive than healthy employees (White, 1983). Additionally, this result underscores an awareness by the Human Resource practitioners of the dysfunctional impact of poor mental health on organisational outcomes which has been well documented (Cooper & Cartwright, 1994; DeFrank & Cooper, 1987; Greenberg et al., 1995; Ivancevich et al., 1990; Sauter et al., 1992; Sperry, 1991; Zolkos, 1994).

The perception was also held that employers are obligated under the Health and Safety in Employment Act (HSE, 1992) to address any issues relating to employee well-being. This perception is aligned with the provision in the HSE Act which defines all practicable steps to be taken by employers to ensure the safety of employees. According to Williams (1994), an employer's duty to provide a safe working environment in terms of physical health is well acknowledged, however it is argued that the promotion of mental health in the workplace is more controversial. It is therefore interesting to note that 19% of those respondents who indicated that organisations have a responsibility to address mental health issues, understood the provision in the HSE Act to ensure the safety of employees to include mental well-being as well as physical wellbeing. This perception, although not significant in terms of percentages, is encouraging in that it constitutes a tendency towards supporting the argument made by Hodge (1996) that there is no logical reason why hazards to mental health in the workplace should be excluded from the scope of an employer's duty of care to ensure the safety of employees.

An additional interesting perception as to why organisations have a responsibility to address mental health issues centred around the theme that organisations play a key role in employee mental health. Nineteen percent of the sub-sample indicating that organisations have a responsibility held this perception, which is echoed in the growing literature that upholds that the workplace is becoming an increasingly important environment for promoting mental health (Cox, 1997; Millar, 1990; Sperry et al., 1994). It may be argued that this perception is reflective of the Human Resource practitioners coming into line with the current feeling that addressing employee mental well-being is a dual responsibility of the individual and the employer as the organisation

determines the work environment which in turn impacts upon employee well-being (Bateman, 1996).

Prevalence of Poor Mental Health in the Workplace

Only 17% of the Human Resource practitioners perceived poor mental health in the New Zealand workplace as prevalent. Forty-four percent of the sample considered poor mental health in the New Zealand workplace as moderately prevalent and 30% perceived poor mental health as not prevalent. It should be noted that the quality of these results could have been affected due to possible difficulties that respondents could have had on commenting at the general level of the 'New Zealand workplace' as a result of their limited exposure to organisations other than the ones in which they presently work. The broad nature of the term 'poor mental health' could have further hindered respondents in making what they perceived to be accurate responses. Despite these limitations however, it is interesting to note that poor mental health was perceived by only a small percentage of the sample as being prevalent in the New Zealand workplace. At a surface level, this perception is thought-provoking when considering the finding of an international survey which indicated that New Zealand office workers were amongst the most stressed in the world (Sullivan, 1995).

The limitation of the broad term of 'poor mental health' was overcome and the quality of the results were enriched when respondents were required to comment on their perceptions of specific mental health issues as problems in the workplace.

Psychological/emotional issues emerged as a category that was perceived by the highest percentage of the respondents (43%) as being a problem or major problem in the workplace. Chemical dependency and alcohol abuse were perceived as moderate or minor workplace problems by 68% and 54% of the sample respectively. The perception of workplace alcohol abuse supports the results of a New Zealand study (Inkson, n.d. cited in Harris & Trusty, 1997) which revealed that employees in the companies studied, perceived alcohol to be a relatively unimportant problem in the workplace. The same study reported that 53% of the employees studied indicated that alcohol abuse was a minor problem.

These results were interesting and confirmatory when interpreted in relation to the respondents perceptions of the prevalence of various mental health problems in the organisations in which they work. Higher percentages of the sample perceived depression, chemical dependency and alcohol abuse as not prevalent or not prevalent at all in their organisations, however, higher percentages of the respondents perceived anxiety and burnout as prevalent or very prevalent. It was difficult to interpret these findings in relation to the literature due to the lack of basic surveillance data on the prevalence of mental health problems among New Zealand employee groups. However, it is of interest to consider and comment on these findings in terms of the estimations of the prevalence of various mental health problems at the level of more generalised populations.

When taking into consideration that a Christchurch epidemiology study (Wells et al., 1989) revealed that alcohol abuse/dependence affected 19% of the sample population and that this prevalence rate was amongst the highest for alcohol abuse/dependence when compared to overseas research, the perception of the low prevalence of workplace chemical dependency and alcohol abuse appears intriguing, especially when approximately 70% of people with these problems are argued to be in full-time employment (Tollestrup, 1994a). A New Zealand Ministry of Health report (New Zealand Herald, 1997) which revealed that alcohol abuse is one of the most common mental health disorders in New Zealand, also renders the perception of its prevalence as interesting. Similarly, research conducted in the United States revealed that the high rates of alcohol abuse/dependence necessitated that services be provided for managers and professionals (Bromet et al., 1990). The perception of the prevalence of workplace alcohol abuse does however reinforce the New Zealand study (Inkson, n.d. cited in Harris & Trusty, 1997) where the results led to the comment that there appears to be far less emphasis on substance abuse issues in the New Zealand workplace in comparison to the United States (Harris & Trusty, 1997).

The respondents' perception of the low prevalence of depression appears particularly intriguing when considering the published prevalence rates of depression in both New Zealand (Wells et al., 1989) and overseas (Bromet et al., 1990; Greenberg et al., 1993). The Christchurch epidemiology study revealed that the sample population had the highest rates for major depression in relation

to other international epidemiology studies (Wells et al., 1989). Additionally, it has been reported that the prevalence rates of depression are increasing in each new generation of New Zealanders and that depression represents one of the most common mental health disorders in the country (Ministry of Health Report, cited in New Zealand Herald, 1997). A plausible explanation for the respondents possible underestimation of the prevalence of depression in the workplace could be attributable to the fact that employees suffering from depression tend not to seek help and attempt to perform their responsibilities at work while suffering from sometimes debilitating symptoms (Greenberg et al., 1993). Additionally, it has been argued that employees may be reluctant to show what they consider to be a personal inadequacy or difficulty in managing part of their lives (Tollestrup, 1994b). Hence, Human Resource practitioners may not be aware and therefore informed of the prevalence of depression in the workplace.

When combining the percentages of the perceived prevalence of anxiety, burnout and depression, a high percentage (67%) of the total sample perceived these outcomes as prevalent or very prevalent in the organisations in which they work. Based on this combination of percentages and the respondents perceptions of various mental health issues as problems in the workplace, the psychological/emotional issues (anxiety, burnout and depression) strongly emerged as a category of issues that are perceived to be prevalent or very prevalent. In addition, psychological/emotional issues are seen as more of a problem in organisations in relation to the outcomes of chemical dependency and alcohol abuse.

An impressive percentage of the sample (68%) indicated that the problem of poor mental health in the workplace is serious enough to warrant intervention. This finding appears unusual in relation to the lower percentages that characterised the sample's perception of the various mental health issues as problems in the workplace (these percentages have been previously discussed in this section). It should be noted however, that the slight ambiguity of the word 'serious' could possibly have detracted from the quality of this result. In retrospect, two interpretations of this word could have been possible. The first could interpret 'serious' to indicate that the problem of poor mental health is just as important (serious) as other organisational problems to address. The second interpretation could have taken 'serious' to imply the severity (seriousness) of

the problem of poor mental health in the workplace. This second option represents the interpretation that was intended by the researcher. Despite this possible limitation, valuable information was gathered from the respondents' comments concerning their perceptions of poor mental health in the workplace in terms of warranted intervention.

The most commonly given reason for poor mental health warranting intervention was that poor employee mental health impacts upon organisational efficiency and performance. Once again, this perception reinforces the literature that underscores the relationship between the mentally healthy employee and organisational efficiency (Cooper & Cartwright, 1994; DeFrank & Cooper, 1987; Ivancevich et al., 1990; Sauter et al., 1992; Sperry, 1991; Zolkos, 1994). An additional common perception was that poor mental health issues warrant reactive intervention only. That is, interventions that help employees who have been identified as being in distress. This perception was held by 32% of the Human Resource practitioners who indicated that poor employee mental health is serious enough to warrant workplace intervention and by 14% of those respondents who indicated that poor mental health is not serious enough to warrant intervention. This perception appears intuitive when considering the fact that reactive (tertiary) interventions are reported to be far more commonly implemented in the workplace (Murphy, 1988) and that treatment in the form of reactive interventions is often easier to implement in organisations than curative, proactive interventions (Cooper & Cartwright, 1994). However, this perception is not in alignment with the emerging literature highlighting the importance of more proactive interventions aimed at preventing employees from experiencing work-related distress (APA/NIOSH, 1992; Gardell, 1982; Murphy, 1995; Pelletier & Lutz, 1988; Quick et al., 1992; Sauter et al., 1990).

General management, Human Resource management and the outsourcing of external, trained occupational health professionals were perceived most commonly as the most appropriate parties to intervene and address mental health issues. This finding appears sensible as these groups have been commonly cited as intervenors in prompting or providing interventions addressing occupational stress and mental health (Daniels, 1996; Megranahan, 1995; Tollestrup, 1994b).

The Human Resource practitioners reported slight differences in their perceived impact of work factors and non-work factors. The sample perceived work factors as having a moderate to high impact on employee mental health and non-work factors as having a high to very high impact. Therefore, the non-work factors were perceived as having slightly more of an impact on employee mental health in relation to work factors.

An impressive number, however, of both work and non-work factors were perceived by the sample as having a high or very high impact on employee mental health. Eighteen of the 31 work factors listed in the questionnaire were perceived by percentages of 54-88% of the respondents as having a high or very high impact on employee mental health. Six of the nine listed non-work factors were similarly perceived by percentages of 68-90% of the respondents as having the same impact. This finding is encouraging as it supports the large amount of literature (e.g. Beehr, 1995; Briner & Hockey, 1994; Burke, 1994; Cooper, 1983; Gardell, 1982; Gutek et al., 1994; Ivancevich et al., 1990; Karasek & Theorell, 1990; Kinicki et al., 1996; Melamed et al., 1995; Sauter et al., 1990) concerning the impact of various occupational and non-occupational stressors and how these stressors may play a role in the development of poor occupational health.

It is interesting to note those work and non-work factors that emerged as having a high or very high impact on employee mental health by the highest percentages of respondents. More than 68% of the respondents perceived the work factors of work overload, employee-job fit, role conflict, organisational restructuring, job insecurity and organisational change as having a high or very high impact on employee mental health. It appears intuitive that such a high percentage of the sample perceived work overload as having such an impact. Literature has argued that the changing nature of work and the introduction of time saving technology can have the effect of increasing workload (Bateman, 1996). In today's competitive economic environment, where enhanced productivity constitutes a major goal of most organisations, the negative aspect of the introduction of such technologies is that they tend to place greater expectations on people as there are more options, enabling employees to work

faster (Bateman). As a result work overload can adversely affect individual psychological well-being (Cooper, 1982). The perception of the impact of role conflict may similarly be attributable to the changing demands and pace of the workplace where individuals may have difficulties in complying with two or more sets of demands or expectations which is argued to precipitate psychological distress (Kahn et al., 1964).

It is not surprising that employee-job fit was perceived by higher percentages (72%) of Human Resource practitioners as having a high or very high impact on employee mental health when interpreted alongside the well-documented literature on the person-environment fit approach to occupational stress (Edwards & Cooper, 1990; Cooper, 1983; Van Harrison et al., 1987). In contemporary working environments it would appear that ensuring employee-job congruence is crucial as it impacts upon individual job satisfaction and psychological well-being (Kelloway & Barling, 1991).

Similarly, it is not surprising that the factors of organisational restructuring, job insecurity and organisational change were perceived as having a significant impact on employee psychological well-being in light of contemporary literature exploring the impact of the increasing prevalence of organisational change and restructuring (Burke, 1994; Cooper & Cartwright, According to the Prime Ministerial Task Force on 1994; Jick, 1983). Employment report (1994), New Zealand has not escaped the downsizing phenomenon, and therefore it may be argued that these work factors have increasingly constituted recognisable occupational stressors in the New Zealand working environment. Job insecurity as a related work stressor was sensibly perceived as having a significant impact on employee well-being. This finding supports the literature exploring the impact of job insecurity amongst survivors of organisational restructuring where research has shown that changes in individual expectations of previously guaranteed employment has a marked psychological impact on those affected (Burke, 1994). It is plausible that a number of the respondents included in the sample could have experienced organisational change or restructuring in the organisations in which they work or in previous employment and therefore were aware of the negative impact that these factors can have on individual psychological well-being. As Human Resource practitioners, it may be argued that the respondents play a pivotal role

in organisational change processes and their exposure to the individual reactions to perceived and actual job losses and changes in work roles may have contributed to their perception of the impact of these occupational stressors on negative mental health outcomes.

Only 24% of the sample perceived the lack of job mobility as having a high or very high impact on employee mental health. This result is surprising in view of the gender demographics of the sample (60% female; 40% male) and in relation to the literature concerning the increased entry of women into the workforce and the associated outcomes associated with constrained job opportunities for women in particular (Sauter et al., 1990).

Non-work factors that were perceived by 68% and above of the sample as having a marked impact on employee mental health included: financial problems; family problems; divorce/separation; bereavement; individual coping ability and bringing work stress into the home environment. These perceptions are not unusual when taking into consideration the significant amount of literature addressing the reciprocal impact of the work environment on the home environment and how this process can have a negative influence on mental health (Frone et al., 1994; Gutek et al., 1994; Thomas & Gangster, 1995). It is interesting to note that financial problems were perceived by such high percentages (87%) of the sample as having a high or very high impact on employee mental health in view of the finding that only 24% of the respondents perceived the lack of pay advancement prospects as impacting significantly upon individual mental well-being.

The Impact of Poor Employee Mental Health on Organisational Outcomes and Individual Outcomes

The Human Resource practitioners perceived poor employee mental health as having a moderate to high impact on organisational outcomes and a high impact on individual outcomes. Therefore, the respondents generally perceived poor employee mental health as having slightly more of an impact on individual outcomes in relation to the organisational outcomes. This finding appears reasonable in light of the fact that research has indicated a clear bias in favour of outcomes that focus on the individual (DeFrank & Cooper, 1987).

Percentages of 51-73% of the respondents perceived poor employee mental health as having a high or very high impact on six of the seven listed organisational outcomes. Perceptions of the impact of mental well-being on individual outcomes was reported by 64% to 82% of the sample indicating a high or very high impact. These results are encouraging when explained in terms of the literature concerning the negative contribution of psychological and behavioural problems in the workplace to organisational outcomes (Greenberg et al., 1995; Reichel & Neumann, 1993; Tollestrup, 1994; Yandrik, 1996) and individual outcomes (Bootzin et al., 1993; Martin et al., 1996; Papalia & Olds, 1992). Again, it is interesting to note those outcomes, both organisational and individual that emerged as being perceived by the highest percentages of the sample as impacting upon by poor employee mental health.

Seventy-three percent of the sample perceived poor employee mental health as having a high or very high impact upon the organisational outcome of productivity quality. Over 68% of the respondents included the following individual outcomes in their perception of the high or very high impact of poor employee health: morale; productivity; efficiency; interpersonal relations skills; coping ability; creativity and decision making ability.

The Implementation of Work-Based Interventions Addressing Occupational Mental Health Issues

Fifty-eight percent of the Human Resource practitioners indicated that primary interventions had been implemented in the organisations in which they work. Tertiary interventions were the next most commonly implemented in organisations, with 49% of the sample indicating that they had been implemented. Thirty-two percent of the sample worked in organisations where secondary interventions had been implemented, suggesting that these interventions were the least commonly implemented group of interventions.

The high mean percentage (58%) for the implementation of the primary interventions represents an encouraging finding as primary interventions have been reported as constituting progressive, preventative strategies in eliminating and/or reducing occupational risks to employee mental health (Burke, 1993; Cooper & Cartwright, 1994; Gardell, 1982; Quick et al., 1992; Murphy, 1995;

Sutherland & Cooper, 1993). Hence this finding would indicate that the organisations in which the Human Resource practitioners work have practices which are aligned with contemporary international literature concerning work-based interventions addressing occupational mental health.

On the other hand, however, this result is thought-provoking in that it appears counter-intuitive in view of the published literature reporting that tertiary interventions are far more commonly implemented than primary intervention strategies in the workplace (Murphy, 1988). Similarly, it has been argued that tertiary prevention programmes are the most common level of prevention, followed by secondary prevention interventions (Quick et al., 1992).

A significant amount of the literature pertaining to the subject of occupational mental health and work-based intervention strategies addressing employee psychological well-being has been published in countries abroad, in particular the United States and Scandinavian countries. Despite the fact that New Zealand literature on occupational stress as an organisational concern is becoming increasingly prevalent (e.g. Bateman, 1996; Pogson, 1996; Tollestrup, 1994a; 1994b), literature on the topic of occupational mental health is somewhat limited in terms of its breadth of coverage of the issues involved in addressing mental health in the workplace. The more established overseas literature, coupled with the fact that occupational mental stress is a recognised injury for workers' compensation claims in many overseas countries (Bateman, 1996) may be argued to indicate that countries such as the United States are further along the path to understanding and addressing employee psychological well-being in the workplace in relation to New Zealand. It seems surprising therefore, that strategies to address occupational mental health in New Zealand organisations have been suggested by the findings of the present survey to be more progressive than those implemented in overseas countries such as the United States, most of which are commonly tertiary interventions.

There are therefore two ways in which the above mentioned finding can be interpreted. The first interpretation is that primary interventions were correctly reported as being more commonly implemented in the Human Resource practitioners' organisations to address occupational mental health issues. This interpretation would render the finding extremely encouraging. The second revolves around the possibility that many of the respondents could have

misinterpreted the primary interventions in the questionnaire to include strategies implemented in the workplace in general and not necessarily for the purpose of addressing occupational mental health. This explanation is exemplified in a respondents comment that "these are done as normal Human Resource procedures and not to directly address mental health issues". The extent of this perception however is not known.

Taking both interpretations into account, the point is: despite the intention of the questionnaire to elicit information on the implementation of these interventions to specifically address occupational mental health issues, it is still encouraging to note that such a high percentage of the sample indicated that these strategies were implemented in the workplace. It may be argued that the adoption of such strategies point towards organisational management practice that is inclusive of proactive strategies to improve individual well-being and organisational efficiency. Whether or not these organisations are aware of the positive impact that these strategies may have on employee well-being and psychological health in particular, requires further data collection and exploration.

The most commonly implemented intervention was Employee Assistance Programmes (tertiary intervention), followed by the primary interventions of the alteration of physical working conditions and employee involvement in career development. The fourth most commonly implemented intervention was stress management training (secondary intervention). The prevalence of the implementation of these individual interventions appears sensible in relation to the literature. The position of Employee Assistance Programmes (EAP's) as the most commonly implemented intervention is reasonable when considering the increased prevalence of EAP's both in New Zealand (Tollestrup, 1994b) and abroad (Murphy, 1998). As already mentioned, in practice, tertiary interventions are commonly implemented in organisational settings (Murphy, 1988; Quick et al., 1992) and EAP's represent a well established tertiary intervention (Francek, Additionally, it could be a possibility that the Human Resource practitioners perceived EAP's as the most appropriate intervention to address mental health issues. It is interesting to note that more than half of the sample indicated that the tertiary interventions of in-house counseling and consultation arrangements with outside mental health providers had been implemented in their organisations. Although not significantly high, these percentages do point to the organisational utilisation of reactive forms of intervention. This finding is encouraging from the point of view that interventions are in place in organisations to help employees in distress. Whether or not these reactive interventions are implemented in conjunction with the primary interventions to address occupational mental health issues is not known, and further exploration would be required to draw further sensible conclusions.

Practical training programmes such as the above mentioned stress management training along with goal setting and interpersonal skills training were the most commonly implemented secondary interventions. These secondary interventions were more prevalent than education programmes concerning various mental health issues. A reason for this reported underutilisation of these strategies may be the possibility that practical training activities may have more face validity and help with individual coping strategies which may be beneficial not only to mental well-being, but many aspects of organisational life. Additionally, practically focused interventions may be less difficult to evaluate in terms of outcomes such as performance improvement. Another plausible explanation for the low prevalence of education programmes on alcohol abuse, chemical dependency and depression could relate to the findings that these mental health problems were not perceived as being prevalent in the organisations in which the respondents work.

Education programmes on anxiety, although not commonly implemented, was the most commonly implemented educational programmes. Again a possible explanation for the position of this intervention in relation to the other educational interventions relates to the finding that anxiety was perceived to be the most prevalent in organisations by the Human Resource practitioners. It appears surprising that education programmes on mental well-being in general was so unpopular due to the fact that 94% of the respondents indicated that organisations have a responsibility to address mental health issues.

The Human Resource practitioners were requested to provide justifications as to why the interventions listed in the questionnaire had not been implemented in their organisations. The most common reasons as to why the primary interventions had never been implemented in various respondents' organisations was that there is no apparent perceived need and primary

interventions were perceived as being inappropriate in the organisations in which these respondent work. A possible reason as to why these respondents perceived primary interventions as inappropriate could relate to the organisational perception reported in the literature that stress and other associated outcomes are individually related and therefore, the most appropriate interventions focus on changing the individual rather than the working environment (Cooper & Cartwright, 1994). It is interesting to note that this perception appears non-sensical in relation to the finding that more than 50% of the sample perceived many of the work factors as having an impact on employee mental health. It could therefore be argued that primary interventions addressing these work factors are indeed appropriate as they would contribute to a decline in their negative impact on employee psychological health.

Justifications as to why the secondary and tertiary interventions had not been implemented, again included the perception that there is no apparent need and that there exists a lack of available time and resources. An additional, interesting reason as to the non-implementation of the various secondary and tertiary interventions was that there is no clear justification of the benefits of such interventions in relation to the costs involved their implementation. On the surface, this perception appears sensible as evaluating the benefits of many workplace interventions addressing issues in the psychological domain may be difficult to quantify in the short term in terms of the direct financial outlay for their implementation. However, it was found that more than half of the sample perceived poor employee mental health as having an impact upon organisational outcomes that are manifest in both direct and indirect organisational costs. It may be argued therefore, that this acknowledgement coupled with the perceived prevalence of various psychological/emotional issues in the workplace, indicates that having interventions in place to address these issues would contribute to a decline in the impact of poor mental health on these organisational outcomes in The perception that it is costly to implement workplace terms of costs. interventions may therefore be counteracted by the argument that poor mental health is costly to organisations if left unaddressed (APA/ NIOSH, 1992, Greenberg et al., 1995).

The recurring perception of the lack of apparent need to implement various primary, secondary and tertiary interventions seems contradictory when taking into consideration the finding that psychological/emotional issues emerged as being prevalent in organisations. It may be argued that if these issues have been found to be organisationally prevalent and it has been indicated by a significant percentage of the sample that organisations have a responsibility to address mental health issues, then an apparent need to implement interventions to address these issues would be evident.

Future Implementation of Work-Based Interventions Addressing Occupational Mental Health Issues

Low percentages (5-20%) of those respondents who indicated that a variety of the primary, secondary and tertiary interventions had not been implemented in the organisations in which they work indicated that they would be implemented in the future. However, a higher percentage suggested that the implementation of Employee Assistance Programmes (tertiary intervention), the secondary interventions of stress management training, goal setting and employee involvement in career development (primary intervention) would be considered ahead of the remaining interventions.

It is interesting to relate these findings to the implementation of the various interventions in the respondents' organisations. Employee Assistance Programmes (tertiary intervention) was the most commonly implemented intervention and it was the intervention most frequently considered for future workplace implementation. This finding reinforces the argument that EAP's may be perceived by the Human Resource practitioners as the most appropriate intervention to address mental health issues.

Excluding the tertiary intervention of EAP's, the prevalence of various interventions in terms of workplace implementation differed from the order of interventions that would be considered for future implementation by those respondents whose organisations had not implemented various interventions. These differences revealed an interesting finding. In the respondents' organisations where various primary, secondary and tertiary interventions had been implemented, the prevalence of primary interventions ahead of secondary interventions points towards the apparent use of proactive interventions to address occupational mental health issues. In the respondents' organisations

where various interventions had not been implemented, Human Resource practitioners indicated that they would consider implementing secondary interventions ahead of primary interventions in the future. This order of future implementation is more reflective of the use of reactive strategies to address mental health issues in the workplace.

The Effectiveness of Work-Based Interventions Addressing Occupational Mental Health Issues

The quality of the results to the question concerning which intervention category (primary, secondary or tertiary) the respondents perceived as being most effective was affected due to the way in which this question was structured in the questionnaire. Results of a superior quality and accuracy would have been attained if the respondents had been requested to rank the intervention categories in terms of their perceptions of these categories efficacy in addressing occupational mental health issues. However, averages of the percentages of the sample who perceived the various primary, secondary and tertiary interventions as being effective or very effective in addressing workplace mental health issues gave insight into the intervention category that was perceived by higher percentages of Human Resource practitioners to be effective or very effective.

The average percentages of the sample's perception of the primary, secondary and tertiary interventions as being effective or very effective in addressing occupational mental health issues indicated that a slightly higher average percentage (48%) perceived the primary interventions as being effective or very effective. An average of 46% of the sample perceived the tertiary interventions as being effective or very effective in addressing workplace mental health issues. The secondary interventions were characterised by the lowest average percentage of 32% of the sample indicating that they perceived this group of interventions as being effective or very effective work-based interventions.

It is interesting that the pattern of average percentages representing the implementation of the primary, secondary and tertiary interventions mimics the order of the average percentages representing the sample's perception of these different intervention levels as being effective or very effective in addressing

occupational mental health issues. Therefore, it may be argued that those interventions that were perceived by higher percentages of the sample as being effective or very effective were more commonly implemented in the organisations in which the respondents work.

Percentages of 51-58% characterised the sample's perception of five of the eight primary interventions as being effective or very effective in addressing occupational mental health issues. These five interventions included: the encouragement of participative management; employee involvement in career development; establishment of flexible work schedules; job redesign and the alteration of physical working conditions. These perceptions were difficult to relate to the literature due to the fact that studies that evaluate organisational interventions designed to eliminate and/or reduce employee stressors are uncommon in the published literature (Cooper & Payne, 1992). However, various studies have indicated the efficacy of the reduction of role stress through increased participation in goal-setting and studies addressing the effects of increased job autonomy and work schedule autonomy have indicated that these interventions are positively related to emotional well-being (Burke, 1993).

Three of the eleven secondary interventions were perceived by percentages of 51-59% of the sample as being effective or very effective in addressing workplace mental health issues, which included interpersonal skills training, goal setting and stress management training. The education programmes on various mental health issues were perceived by percentages of 12% to 20% as being effective or very effective in addressing mental health issues in the workplace. This perception is surprising when interpreted alongside research that has revealed findings supporting the value of psychoeducational training programmes for preventative mental health in the workplace (e.g. Kagan et al., 1995). The perceived efficacy of the various mental health education programmes possibly reveals a perceived reason as to the low prevalence of these interventions in terms of implementation in organisations. Again, these findings were difficult to interpret in relation to the literature as few studies have compared the effectiveness of different stress reduction training techniques (Murphy, 1988). Secondary intervention strategies have been shown to be effective in extending an individual's psychological resources (Cooper & Cartwright, 1994), however, they are argued to be effective only in the short

term and of limited value if implemented in isolation of an integrated occupational health strategy (Burke, 1993).

Percentages of over 51-62% of the sample perceived Employee Assistance Programmes and consultation arrangements with outside mental health providers as tertiary interventions that are effective or very effective in addressing occupational mental health issues. This perception of EAP's corresponds with some studies that have shown them to be effective in terms of increases in employees utilising the service, performance level increases after employee contact with an EAP and in terms of company savings (Murphy, 1988). However, despite the fact that EAP's have the potential for reducing worker distress, it has been argued that they need to incorporate primary prevention components in order to realise this potential (Murphy).

Employee Assistance programmes (tertiary intervention) was the most commonly perceived intervention as being effective or very effective in addressing occupational mental health issues, followed by interpersonal skills training (secondary intervention), encouragement of participative management (primary intervention, goal setting (secondary intervention) and employee involvement in career development (primary intervention).

Again, it is interesting to note the primary, secondary and tertiary interventions that have been implemented in the organisations in which the respondents work in relation to the respondent's perceptions of these interventions as being effective or very effective in addressing mental health issues in the workplace. The highest percentage of the sample (68%) indicated that EAP's had been implemented in the organisations in which they work and the highest percentage (62%) of the sample perceived this intervention as being effective or very effective in addressing workplace mental health issues. Sixtysix percent of the sample had indicated that the primary intervention of the alteration of physical working conditions was implemented in their organisations and 51% perceived this intervention as being effective or very effective. Employee involvement in career development had been indicated by 63% of the sample to be implemented in their organisations and 56% perceived this primary intervention strategy as being effective or very effective. The secondary intervention of stress management training was perceived by 51% of the sample as being effective or very effective and 62% of the sample had indicated that this strategy had been implemented in the organisations in which they work.

It was interesting to note that the 59% of the sample had indicated that changes in organisational structure had been implemented in their organisation and only 29% perceived this intervention as being effective or very effective in addressing occupational mental health issues. This perception can be argued to be sensible in relation to the literature that states that primary intervention efforts such as organisational changes in structure can constitute a source of stress for employees (Quick et al., 1992). However, it is argued that it is in these circumstances that secondary interventions play an important role by aiding in individual adjustment to the stress associated with primary prevention (Quick et al.).

Comments on additional interventions that higher percentages of the sample perceived as being effective in addressing occupational mental health included: management taking responsibility for the recognition of mental health issues in the workplace and implementing appropriate interventions to address such issues; empowering employees within the organisation and implementing proactive interventions aimed at preventing distress in the workplace rather than merely concentrating on reactive interventions aimed at treating employees already in distress. It is encouraging to note that many of these comments included the perception that more proactive, progressive strategies are effective in addressing occupational mental health. This perception is well aligned with contemporary literature that advocate a preventative approach to occupational mental health, rather than a band-aid curative approach (Gardell, 1982; Sutherland & Cooper, 1993). Additionally, it has been argued that workplace interventions that are comprehensive in addressing individual and organisational factors hold the greatest promise for the effective prevention of occupational stressors (Murphy, 1995).

Demographic Differences

The study revealed that there were generally no consistent demographic differences across the composite variables that were computed. Similarly, only marginal differences were revealed across individual variables. The only

apparent demographic differences related to gender. There were gender differences for the composite variables relating to the impact of career development on employee mental health and the impact of poor employee mental health on individual outcomes. The females of the sample generally perceived that career development to have more of an impact on mental health and that poor mental health had more of an impact on individual outcomes, than did the male respondents.

It is particularly interesting to note the gender difference with regard to the impact of career development on employee mental health in relation to the literature reporting the increasing trend of the participation of women in the workforce and the impact of constrained job opportunities on women in particular (Cooper, 1983; Sauter et al., 1990). Additionally, the work factors associated with career development perceived to have slightly more of an impact on women would support the literature which comments that this impact may be attributable to the additional role demands inherent in balancing the demands of work and family life (Duxbury & Higgins, 1994; Sauter et al, 1990).

CHAPTER SIX: CONCLUSION

In response to the need to better understand how parties to organisational politics perceive the risks of stress and various stress management interventions (Daniels, 1996), the present study contributes to an understanding of how Human Resource practitioners, who represent the most common selectors and drivers of interventions addressing employee health (Megranahan, 1995), perceive occupational mental health issues.

The Human Resource practitioners' acknowledgement of organisational responsibility to address mental health issues represents a positive perception which can only be beneficial to organisations in contemporary organisational settings where the changing nature of work is characterised by inherent risks to psychological health. The value of this perception is underscored by the Human Resource practitioners dual concern with employee well-being and organisational effectiveness and their important role in policy making regarding these concerns. Beyond demonstrating a step in the right direction in terms of the way in which organisational responsibility and mental health issues are perceived, this acknowledgement does not necessarily imply that mental health issues are being adequately addressed in the workplace.

At a surface level, the Human Resource practitioners do not perceive poor employee mental health as being prevalent in the New Zealand workplace. However, the categorisation of the term 'poor mental health' into more specific mental health outcomes is accompanied by the perception that psychological/emotional issues are prevalent in the organisations in which the Human Resource practitioners' work.

The Human Resource practitioners' perceptions of the impact of work stressors on employee mental health represents an acknowledgement that organisational factors can play a role in the development of psychological ill-health. Organisational change, organisational restructuring and job insecurity are increasingly prevalent stressors in the New Zealand work environment and emerged as a group of work risks that were perceived by high percentages of Human Resource practitioners' as having a significant impact on individual mental health.

The perceptions reported by the Human Resource practitioners, of non-work stressors and their impact on employee mental health were aligned with those reported in the organisation psychological literature. Similarly, they appeared to demonstrate an understanding of the impact of poor employee health on organisational outcomes and individual outcomes. These practitioners recognise that poor employee health affects not only the individual, but can have negative consequences on organisational outcomes in terms of direct and indirect costs.

Primary interventions are the most commonly implemented in the Human Resource practitioners' organisations. There is however doubt that these interventions have been implemented to address occupational mental health issues. Rather the possibility exists that they represent general organisational activities that constitute normal organisational procedures. It is therefore questionable whether the Human Resource practitioners do indeed have a thorough understanding of primary intervention strategies and the part that these strategies play in reducing and/or eliminating occupational risks to mental health. Despite the possibility that these interventions may not be implemented to address occupational mental health, the prevalence of these work-based strategies are encouraging in that they represent progressive organisational practices. The benefits of having these practices in place in organisations would be maximised if underscored by an understanding of the positive impact that primary interventions can have on employee psychological health.

Tertiary interventions follow the primary interventions in terms of workplace implementation. As a tertiary intervention, Employee Assistance Programmes are the most commonly implemented intervention. It is also perceived by the majority of Human Resource practitioners as being effective in terms of addressing occupational mental health. These findings support the possibility that the Human Resource practitioners' perceive EAP's as the most appropriate intervention when it comes to addressing psychological issues in the workplace.

The secondary interventions are the least commonly implemented. Practical training programmes are the most prevalent of the secondary interventions implemented. It is discouraging that educational programmes addressing various mental health issues are underutilised in these organisations.

Secondary interventions incorporating educational components play an important role in increasing awareness of pertinent organisational stressors and their impact on mental health and minimising the need for tertiary interventions. Such stressors are inherent in many of the primary interventions such as changes in organisational structure and job redesign. In organisation settings characterised by these stressors, education mediates the relationship between individual coping abilities and mental health outcomes.

Recommendations for Organisations

It is encouraging that primary, secondary and tertiary interventions are to varying degrees implemented in the organisations in which the Human Resource practitioners work. An integration of all three levels of prevention would be a positive step towards uncovering and understanding the relationship between psychological issues in the workplace and work-based strategies that aim to prevent and not merely treat employee mental ill-health.

Recognising both the positive and negative consequences of general organisational procedures that constitute primary interventions would be an organisational advantage in terms of utilising familiar practices and incorporating secondary interventions to address occupational mental health. The incorporation of preventative components, including secondary educational components, into EAP's would enable this prevalent intervention to move beyond its traditionally curative approach.

Enriching the Human Resource practitioners' understanding of the process of work-based interventions addressing occupational mental health would compliment their understanding of the impact of work and non-work stressors on employee psychological health as well as the impact of employee mental ill-health on organisational and individual outcomes. This understanding would enable Human Resource practitioners to make informed contributions to organisations taking responsibility to address mental health in the workplace.

Recommendations for Future Research

Research aimed at exploring the perceptions held by other organisational groups on the topic of occupational mental health would be worthwhile in order to gain a broader perspective on how this issue is perceived in the workplace. Senior management and employee groups constitute appropriate sample populations to include in such research.

As the present study explored the issue of occupational mental health in very broad terms, research focusing on specific aspects of this topic would provide a more detailed exploration of these aspects. Research characterised by quantitative methodologies would render such research valuable in terms of the quality of the data for the purpose of comparisons across organisational groups.

Qualitative methodologies would provide an alternative approach to research which aims to further explore and capture the sense that lies within different perceptions and practices surrounding specific occupational mental health issues.

REFERENCES

- Adelmann, P.K. (1987). Occupational complexity, control and personal income.

 Their relation to psychological well-being in men and women. *Journal of Applied Psychology*, 72, 529-537.
- American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (DSM-111-R) (3rd ed.rev.). Washington, D.C:
 American Psychiatric Association.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (DSM-1V) (4th ed.rev.). Washington, D.C:
 American Psychiatric Association.
- American Psychological Association/National Institute for Occupational Safety and Health, Health Promotion Panel, 1990 Work and Well-Being Conference. (1992). Occupational mental health promotion: A prevention agenda based on education and treatment. Stress Management, 7, 37-44.
- Armstrong-Stassen, M. (1994). Coping with transition: A study of layoff survivors. *Journal of Organisational Behaviour*, 15, 597-621.
- Babbie, E. (1989). The practice of social research (5th ed). California: Wadsworth Publishing Company.
- Banta, W.F., & Tennant, F. (1989). Complete handbook for combating substance abuse in the workplace. Lexington, Massachusetts:

 Lexington Books.
- Barton, J., & Folkard, S. (1993). Advancing versus delaying shift systems. Special issue: night and shiftwork. *Ergonomics*, 36, 59-64.
- Bateman, P. (1996). Battling the stress monster. Safeguard, July/August, 17-22.
- Baun, W.B., Bernacki, E.J., & Herd, J.A. (1987). Corporate health and fitness programs and the prevention of work stress. In J. Quick, R. Bhagat, J. Dalton, & J.D. Quick (Eds), Work Stress. Health care systems in the workplace (pp. 217-234). New York: Praeger Publishers.
- Beehr, T.A. (1995). Psychological stress in the workplace. London: Routledge.
- Berry, L.M., & Houston, J.P. (1993). *Psychology at work*. Dubuque: Brown & Benchmark Publishers.

- Blumenthal, J.A., Williams, R.S., Needels, T.L., & Wallace, A.G. (1982).
 Psychological changes accompany aerobic exercise in healthy middle-aged adults. *Psychosomatic Medicine*, 44, 529-536.
- Bootzin, R.R., Acocella, J.R., & Alloy, L.B. (1993). Abnormal psychology.

 Current perspectives. International Edition: McGraw-Hill, Inc.
- Boxall, P. (1995a). Human resource management: A conceptual framework. In P.Boxall (Ed), The challenge of human resource management: Directions and debates in New Zealand (pp. 1-25). Auckland: Longman Paul Ltd.
- Boxall, P. (1995b). Business strategy, human resource management and executive leadership. In P. Boxall (Ed), *The challenge of human resource management*. *Directions and debates in New Zealand* (pp. 295-308).

 Auckland: Longman Paul Ltd.
- Briner, R., & Hockey, G.R. (1994). Operator stress and computer-based work.

 In C.L. Cooper, & R. Payne (Eds), Causes, coping and consequences of stress at work (pp. 115-140). Chichester: John Wiley & Sons.
- Brockner, J., Davy, J., & Carter, C. (1985). Layoffs, self-esteem, and survivor guilt: Motivational, affective, and attitudinal consequences.

 Organisational Behavior and Human Decision Making Processes, 36, 229-244.
- Bromet, E.J., & Parkinson, D.K. (1989). Preventive interventions in the workplace. In B. Cooper, & T. Helgason (Eds), *Epidemiology and the prevention of mental disorders* (pp. 217-234). London: Routledge.
- Bromet, E.J., Parkinson, D.K., Curtis, C., Schulberg, H.C., Blane, H., Dunn, L.O., Phelan, J. Dew, M.A., & Schwartz, J.E. (1990).
 Epidemiology of depression and alcohol abuse/dependence in a managerial and professional workforce. *Journal of Occupational Medicine*, 32, 989-995.
- Burke, R.J. (1993). Organisational-level interventions to reduce occupational stressors. Work and Stress, 7, 77-87.
- Burke, R.J. (1994). Sources of managerial and professional stress in large organisations. In C.L. Cooper, & R. Payne (Eds), Causes, coping and consequences of stress at work (pp. 77-114). Chichester: John Wiley & Sons.

- Cartwright, S., & Cooper, C.L. (1992). Mergers and acquisitions: The human factor. Oxford: Butterworth Heinemann.
- Clarke, D.M., & Beck, A.T. (1988). Cognitive approaches. In C.G. Last, & M. Hersen (Eds), *Handbook of anxiety disorders* (pp. 362-385). New York: Pergamon.
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.
- Cohen, S. (1980). After affects of stress on human performance and social behaviour: A review of research and theory. *Psychological Bulletin*, 88, 82-108.
- Cohen, S., & Wills, T.A. (1985). Stress, social support and the buffering hypothesis. *Psychological Bulletin*, 2, 310-357.
- Colligan, M.J., Smith, M.J., & Hurrell, J.J. (1977). Occupational incidence rates of mental health disorders. *Journal of Human Stress*, 3, 34-39.
- Cooper, C.L. (1983). Identifying stressors at work: Recent research developments. *Journal of Psychosomatic Research*, 27, 369-376.
- Cooper, C.L. (1986). Job distress: Recent research and the emerging role of the clinical occupational psychologist. Bulletin of the British Psychological Society, 39, 325-331.
- Cooper, C.L., Allison, T., Reynolds, P., & Sadri, G. (1992). An individual-based counseling approach for combating stress in british post office employees. Conditions of Work Digest, 11, 246-256.
- Cooper, C.L., & Cartwright, S. (1994). Healthy mind; healthy organisation. A proactive approach to occupational stress. *Human Relations*, 27, 455-471.
- Cooper, C.L., & Kelly, M. (1993). Occupational stress in head teachers: A national UK study. British Journal of Educational Psychology, 63, 130-143.
- Cooper, C.L., & Marshall, J. (1976). Occupational sources of stress: a review of the literature relating to coronary heart disease and mental ill-health. Journal of Occupational Psychology, 49, 11-28.
- Cooper, C.L., & Payne, R.L. (1992). International perspectives on research into work, well-being, and stress management. In J.C. Quick, L.R. Murphy, & J.J. Hurrell (Eds), Stress and well-being at work (pp. 348-368).

 Washington DC: American Psychological Association.

- Cooper, C.L., & Sadri, G. (1991). The impact of stress counseling at work. In P.L. Perrewe (Ed), Handbook of job stress. Special issue. Journal of Social Behavior and Personality, 6, 411-423.
- Cox, T. (1997). Workplace health promotion. Work and Stress, 11, 1-5.
- Crouter, A.C. (1984). Spillover from family to work: The neglected side of the work-family interface. *Human Relations*, 37, 425-442.
- Daniels, K. (1996). Why aren't managers concerned about occupational stress? Work and Stress, 10, 352-366.
- DeFrank, R.S., & Cooper, C.L. (1987). Worksite stress management interventions: Their effectiveness and conceptualisation. *Journal of Managerial Psychology*, 2, 4-10.
- Dessler, G. (1994). *Human resource management* (6th ed). Englewood Cliffs: Prentice-Hall Inc.
- De Vaus, D.A (1995). Surveys in social research (4th ed). New South Wales, Australia: Allen & Unwin Pty Ltd.
- Dewe, P. (1989). Developing stress management programs: What can we learn from recent research? Australian and New Zealand Journal of Occupational Health Safety, 5, 493-499.
- Dey, I. (1993). Qualitative data analysis: A user friendly guide for social scientists. London: Routledge.
- Duxbury, L., & Higgins, C. (1994). Interface between work and family: A status report on dual-career and dual-earner mothers and fathers. *Employee Assistance Quarterly*, 9, 55-80.
- Dwyer, D.J., & Ganster, D.C. (1991). The effects of job demands and control on employee attendance and satisfaction. *Journal of Organisation Behavior*, 12, 595-609.
- Eaton, W., Anthony, J., Mandel, W., & Garrison, R. (1990). Occupations and the prevalence of major depressive disorder. *Journal of Occupational Medicine*, 32, 1079-1087.
- Edwards, J.R., & Cooper, C.L. (1990). The person-environment fit approach to stress: Recurring problems and some suggested solutions. *Journal of Organisational Behavior*, 11, 293-307.

- Elkin, A.J., & Rosch, P.J. (1990). Promoting mental health at the workplace:

 The prevention side of stress management. Occupational Medicine: State of the Art Review, 5, 739-754.
- Fletcher, B.C. (1994). The epidemiology of occupational stress. In C.L.Cooper, & R. Payne (Eds), Causes, coping & consequences of stress at work (pp.3-53). Chichester: John Wiley & Sons.
- Francek, J.L. (1987). EAP's: A strategy for managing stress. In J. Quick, R. Bhagat, J. Dalton, & J.D. Quick (Eds), Work Stress. Health care systems in the workplace (pp. 253-265). New York: Praeger Publishers.
- Freeman, A., Pretzer, J., Fleming, B., & Simon, K.M. (1990). Clinical applications of cognitive therapy. New York: Plenum.
- French, J., & Caplan, R. (1972). Organisational stress and individual strain. In A.J. Marrow (Ed), *The failure of success* (pp. 31-66). New York: Amacon.
- Frone, M.R., Russell, M., & Cooper, M.L. (1994). Relationship of work and family stressors to psychological distress: the independent moderating influence of social support, mastery, active coping, and self-focused attention. In R. Crandall, & P.C. Perrewe (Eds), Occupational stress. A handbook (pp. 129-150). Washington DC: Taylor & Francis.
- 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.
- Gardell, B. (1982). Scandinavian research on stress in working life. *International Journal of Health Services*, 12, 31-41.
- Gardell, B. (1987). Efficiency and health hazards in mechanised work. In J. Quick, R. Bhagat, J. Dalton, & J.D. Quick (Eds), Work stress. Health care systems in the workplace (pp. 50-71). New York: Praeger Publishers.
- Gavin, J.F. (1975). Employee perceptions of the work environment and mental health: A suggestive study. *Journal of Vocational Behavior*, 6, 217-234.
- Gotlib, I.H., & Hammen, C.L. (1992). Psychological aspects of depression.

 Toward a cognitive-interpersonal integration. Chichester: John Wiley & Sons Ltd.

- Greenberg, J., & Baron, R.A. (1995). Behavior in organisations. Understanding and managing the human side of work (5th ed). Englewood Cliffs:

 Prentice-Hall Inc.
- Greenberg, P.E., Finkelstein, S.N., & Berndt, E.R. (1995). Economic consequences of illness in the workplace. Sloan Management Review, Summer, 26-38.
- Greenberg, P.E., Stiglin, M.A., Finkelstein, M.D., & Berndt, E.R. (1993).

 Depression: A neglected major illness. *Journal of Clinical Psychiatry*, 54, 419-424.
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. Academy of Management Review, 9, 438-448.
- Gutek, B.A., Repetti, R.L., & Silver, D.L. (1994). Nonwork roles and stress at work. In C. Cooper, & R. Payne (Eds), Causes, coping and consequences of stress at work (pp. 114-140). Chichester: John Wiley & Sons Ltd.
- Harma, M. (1993). Individual differences in tolerance to shiftwork: A review. Ergonomics, 36, 101-109.
- Harris, M.M., & Heft, L.L. (1992). Alcohol and drug use in the workplace: Issues, controversies, and direction for future research. *Journal of Management*, 18, 239-266.
- Harris, M.M., & Trusty, M.L. (1997). Drug and alcohol programs in the workplace: A review of recent literature. *International Review of Industrial and Organisational Psychology*, 12, 289-315.
- Health and Safety in Employment Act (1992). Wellington, New Zealand.
- Healy, D., Minors, D.S., & Waterhouse, J.M. (1993). Shiftwork, helplessness and depression. *Ergonomics*, 29, 17-25.
- Hedge, A., Sims, W.R., & Becker, F.D. (1995). Effects of lensed-indirect and parabolic lighting an the satisfaction, visual health, and productivity of office workers. Special issue: Slipping, tripping, and falling accidents. *Ergonomics*, 38, 260-280.
- Herr, E.L., & Cramer, S.H. (1992). Career guidance and counselling through the life span. New York: Harper Collins Publishers.
- Hodge, B. (1996). Suing for stress. Employers' legal responsibility. Safeguard, Sept/Oct, 14-17.

- Ivancevich, J.M., Matteson, M.T., Freedman, S.M., & Phillips, J.S. (1990).
 Worksite stress management interventions. American Psychologist, 45, 252-261.
- Jackson, S.E., & Schuler, R.S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. Organisational Behavior and Human Decision Processes, 36, 16-78.
- Jick. T. (1983). The stressful effects of budget cuts in organisations. In L.S. Rosen (Ed), Topics in managerial accounting (pp. 267-281). Canada: McGraw-Hill Ryerson Ltd.
- Kagan, N.I., Kagan, H., & Watson, M.G. (1995). Stress reduction in the workplace: The effectiveness of psychoeducational programs. *Journal of Counseling Psychology*, 42, 71-78.
- Kahn, R.L. (1987). Work stress in the 1980s: research and practice. In J. Quick,
 R. Bhagat, J. Dalton, & J.D.Quick (Eds), Work stress. Health care
 systems in the workplace (pp. 311-320). New York: Praeger Publishers.
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D., & Rosenthal, R.A. (1964).
 Organisational stress: Studies in role conflict and ambiguity. New
 York: John Wiley & Sons.
- Kaliterna, L., Vidacek, S., Radosevic-Vidacek, B., & Prizmic, Z. (1993). The reliability and stability of various individual difference and tolerance to shiftwork measures. *Ergonomics*, 36, 183-189.
- Kandel, D.B., Davies, M., & Raveis, V.H. (1985). The stressfulness of daily roles for women: Marital, occupational, and household roles. *Journal of Health and Social Behavior*, 26, 64-78.
- Kandolin, I. (1993). Burnout of female and male nurses in shiftwork.
 Ergonomics, 36, 141-147.
- Karasek, R., & Theorell, T. (1990). Healthy work: Stress, productivity, and the reconstruction of working life. New York: Basic Books, Inc.
- Keita, G.P., & Hurrell, J.J. (1994). Introduction. In G.P. Keita, & J.J. Hurrell (Eds), Job stress in a changing workforce (pp. xiii-xix). Washington DC: American Psychological Association.
- Kelloway, E.K., & Barling, J. (1991). Job characteristics, role stress and mental health. *Journal of Occupational Psychology*, 64, 291-304.

- Kets de Vries, M.F.R., & Balazs, K. (1997). The downside of downsizing.

 Human Relations, 50, 11-50.
- Kinicki, A.J., McKee, M., & Wade, K.J. (1996). Annual review, 1991-1995:

 Occupational health. *Journal of Vocational Behavior*, 49, 190-220.
- Klitzman, S., House, J.S., Israel, B.A., & Mero, R.P. (1990). Work stress, nonwork stress and health. *Journal of Behavioral Medicine*, 13, 221-243.
- Korunka, C., Weiss, A., & Karetta, B. (1993). Effects of new technologies with special regard for the implementation process per se. *Journal of Organisational Behavior*, 14, 331-348.
- Landsbergis, P.A., Schnall, P.L., Deitz, D., Friedman, R., & Pickering, T. (1992). The patterning of psychological attributes and distress by job strain and social support in a sample of working men. *Journal of Behavioral Medicine*, 15, 379-405.
- Lee, C., & Gray, J. (1994). The role of employee assistance programmes. In C.L. Cooper, & S. Williams (Eds), Creating healthy work organisations (pp. 215-245). Chichester: John Wiley & Sons.
- Leiter, M.P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organisational commitment. *Journal of Organisational Behavior*, 9, 297-308.
- Lenna, C.R., & Ivancevich, J.M. (1987). Involuntary job loss: Institutional interventions and a research agenda. Academy of Management Review, 12, 301-312.
- Levi, L. (1994). Work, worker and wellbeing: An overview. Work and Stress, 8, 179-83.
- Lie, I., & Watten, R.G. (1994). VDT work, oculomotor strain, and subjective complaints: An experimental and clinical study. *Ergonomics*, 37, 1419-1433.
- Loewen, L.J., & Suedfeld, P. (1992). Cognitive and arousal effects of masking office noise. *Environment and Behavior*, 24, 381-395.
- Loscocco, K.A., & Spitze, G. (1990). Working conditions, social support, and the well-being of female and male factory workers. *Journal of Health and Social Behavior*, 31, 313-327.

- Lowman, R.L. (1993). Counseling and psychotherapy of work dysfunctions.

 Washington DC: American Psychological Association.
- MacEwen, K.E., & Barling, J. (1994). Daily consequences of work interference with family and family interference with work. Work and Stress, 8, 244-254.
- Magranahan, M. (1995). Quality control for a EAP. *Personnel Review*, 24, 54-64.
- Margolis, B.L., Kroes, W.H., & Quinn, R.P. (1974). Job stress: an unlisted occupational hazard. *Journal of Occupational Medicine*, 16, 654-661.
- Martin, J.K., Blum, T.C., Beach, S.R.H., & Roman, P.M. (1996). Subclinical depression and performance at work. Social Psychiatry and Psychiatric Epidemiology, 31, 3-9.
- Martino, V.D. (1992). Occupational stress: A preventive approach. Conditions of Work Digest, 11, 3-22.
- Maslach, C., & Jackson, S.E. (1984). Burnout in organisational settings.

 Applied Social Psychology Annual, 5, 133-153.
- Matteson, M.T. (1987). Individual-organisational relationships: Implications for preventing job stress and burnout. In J. Quick, R. Bhagat, J. Dalton, & J.D. Quick (Eds), Work Stress. Health care systems in the workplace (pp. 156-171). New York: Praeger Publishers.
- May, T. (1997). Social research. Issues, methods and process (2nd ed).
 Buckingham: Open University Press.
- McBride, A. (1988). Mental health effects of women's multiple roles. *IMAGE:*Journal of Nursing Scholarship, 20, 41-47.
- McIntosh, N.J. (1991). Identification and investigation of properties of social support. *Journal of Organisational Behavior*, 12, 201-217.
- Melamed, S., Ben Avi, I., Luz, J., & Green, M.S. (1995). Objective and subjective work monotony: Effects on job satisfaction, psychological distress, and absenteeism in blue-collar workers. *Journal of Applied Psychology*, 80, 29-42.
- Mendelson, G. (1990). Occupational stress part 1: An overview. Australian and New Zealand Journal of Occupational Health Safety, 6, 175-180.
- Mickleburgh, W.E. (1986). Occupational mental health: A neglected service. British Journal of Psychiatry, 148, 426-434.

- Miles, M.B., & Huberman, A.M. (1994). Qualitative data analysis (2nd ed). California: Sage Publications.
- Millar, J.D. (1990). Mental health in the workplace. An interchangeable Partnership. *American Psychologist*, 45, 1165-1166.
- Miller, L.S., & Kelman, S. (1992). Estimates of the loss of individual productivity from alcohol and drug abuse and from mental illness. In R.G. Frank, & W.G. Manning (Eds), *Economics and mental health* (pp. 91-129). Baltimore: Johns Hopkins University Press.
- Milligan, S., & Clare, A. (1994). Depression and how to survive it. United Kingdom: Random House Ltd.
- Mintz, J., Mintz, L.I., Arruda, M.J., & Hwang, M.S. (1992). Treatments of depression and the functional capacity to work. Archive of General Psychiatry, 32, 761-768.
- Murphy, L.R. (1988). Workplace interventions for stress reduction and prevention. In C.L.Cooper, & R. Payne (Eds), Causes, coping & consequences of stress at work (pp.301-339). Chichester: John Wiley & Sons.
- Murphy, L.R. (1995). Managing job stress. An employee assistance/human resource management partnership. *Personnel Review*, 24, 41-50.
- Murphy, L.R., Hurrell, J.J., & Quick, J.C. (1992). Work and well-being:

 Where do we go from here? In J.C. Quick, L.R. Murphy, & J.J. Hurrell

 (Eds), Stress and well-being at work (pp.331-347). Washington DC:

 American Psychological Association.
- Kiwi's 'more depressed'. (1997, December 17). New Zealand Herald, p.3.
- Newman, C.F., & Haaga, D.A. (1995). Cognitive skills training. In W.

 O'Donohue, & L. Kransner (Eds), Handbook of psychological skills

 training. Clinical techniques and applications (pp. 119-139). Boston:

 Allyn & Bacon (Paramount Publishing).
- O'Driscoll, M.P., & Beehr, T.A. (1994). Supervisor behaviours, role stressors and uncertainty as predictors of personal outcomes for subordinates.

 Journal of Organisational Behavior, 15, 141-155.
- Oppenheim, A.N. (1992). Questionnaire design, interviewing and attitude measurement. London: Pinter Publishers Ltd.
- Pahl, J.M., & Pahl, R.E. (1981). Managers and their wives. London: Allen Lane.

- Papalia, P.E., & Olds, S.W. (1992). *Human development*. United States: McGraw-Hill, Inc.
- Pelletier, K.R., & Lutz, R. (1988). Healthy people healthy business: A critical review of stress management programs in the workplace. *American Journal of Health Promotion, Winter*, 5-19.
- Pierre, K.D. (1986). Enhancing well-being at the workplace: A challenge for EAP's. Employee Assistance Quarterly, 1, 19-28.
- Piotrkowski, C.S., & Repetti, R.L. (1984). Dual-earner families. Marriage and Family Review, 7, 99-124.
- Pogson, I. (1996). Putting the stress on health. Safeguard, July/August, 24.
- Prime Ministerial Task Force on Employment. (1994). Changes in employment by business size, pp.36-39, Wellington, New Zealand.
- Quick, J.C., Murphy, L.R., Hurrell, J.J., & Orman, D. (1992). The value of work, the risk of distress and the power of prevention. In J.C. Quick, L.R. Murphy, & J.J. Hurrell (Eds), Stress and well-being at work (pp.3-13). Washington DC: American Psychological Association.
- Rees, P., & Cooper, C.L. (1992). Occupational stress in health service workers in the U.K. Stress Medicine, 8, 79-90.
- Reichel, A., & Neumann, Y. (1993). Work stress, job burnout, and work outcomes in a turbulent environment. *International Studies of Management and Organisations*, 23, 75-96.
- Remondet, J.H., & Hansson, R.O. (1991). Job-related threats to control among older emplyees. *Journal of Social Issues*, 47, 129-141.
- Revicki, D.A., Whitley, T.W., & Gallery, M.E. (1993). Organisational characteristics, perceived work stress, and depression in emergency medicine residents. *Behavioral Medicine*, 19, 74-81.
- Santa-Barbara, J. (1984). Employee assistance programs: An alternative resource for mental health delivery. Canada's Mental Health, September, 35-38.
- Sauter, S.L., Murphy, L.R., & Hurrell, J.J. (1990). Prevention of work-related psychological disorders. A national strategy proposed by the national institute for occupational safety and health. American Psychologist, 45, 1146-1158.

- Sayers, J., & Toulson, P. (1995). A profile of the changing workforce. In P. Boxall (Ed), The challenge of human resource management: Directions and debates in New Zealand (pp.25-53). Auckland: Longman Paul Ltd.
- Scanlon, W.F. (1991). Alcoholism and drug abuse in the workplace. (2nd ed).

 New York: Praeger Publishers.
- Schaubroek, J., Cotton, J., & Jennings, K. (1989). Antecedents and consequences of role stress: A covariance structure analysis. *Journal of Organisational Behavior*, 10, 35-58.
- Shain, M. (1996). Work, employment and mental health. In R. Renwick, I. Brown, & M. Nagler (Eds), Quality of life in health promotion and rehabilitation. Conceptual approaches, issues and applications (pp. 327-341). Thousand Oaks, California: Sage Publications.
- Shaughnessy, J.J., & Zechmeister, E.B. (1990). Research methods in psychology (2nd ed). Singapore: McGraw-Hill Publishing Company.
- Spelten, E., Smith, L., Totterdell, P., Barton, J., & Folkard, S. (1993). The relationship between coping strategies and GHQ-scores in nurses. *Ergonomics*, 36, 227-232.
- Sperry, L. (1991). Enhancing corporate health, mental health, and productivity. Individual Psychology: Journal of Alderian Theory, Research and Practice, 47, 247-254.
- Sperry, L., Kahn, J.P., & Heidel, S.H. (1994). Workplace mental health consultation. A primer of organisational and occupational psychiatry. General Hospital Psychiatry, 16, 103-111.
- Spurgeon, P., & Barwell, F. (1995). The quality of working life: occupational stress, job satisfaction and well-being at work. In M. Bramford (Ed), Work and health. An introduction to occupational health care (pp.101-130). London: Chapman & Hall.
- Sullivan, M. (1995). Taking charge of stress: Strategies for the workplace. NZ Business, September, 14-21.
- Sutherland, V.J., & Cooper, C.L. (1993). Identifying distress among general practitioners: Predictors of psychological ill-health and job dissatisfaction. Journal of Social Science and Medicine, 37, 575-581.
- Taylor, C.B., & Arnow, B. (1988). The nature and treatment of anxiety disorders. New York: The Free Press.

- Thomas, L.T., & Ganster, C.G. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective.

 Journal of Applied Psychology, 80, 6-15.
- Tollestrup, S. (1994a). The human factor. Safeguard, May, 15-17.
- Tollestrup, S. (1994b). The human factor: Integrating employee assistance programmes. Safeguard, July, 16-18.
- Turner, S. (1995). Identifying depression in the workplace. HR Magazine, October, 82-84.
- Van Harrison, R., Moss, G.E., Dielman, T.E., Horvath, W.J., & Harlan, W.R. (1987). Person-environment fit, type A behavior, and work strain: The complexity of the process. In J. Quick, R. Bhagat, J. Dalton, & J.D. Quick (Eds), Work Stress. Health care systems in the workplace (pp. 72-91). New York: Praeger Publishers.
- Vennochi, J. (1995). When depression comes to work. Working Women, 8, 42-45.
- Vicary, J.R. (1994). Primary prevention and the workplace. The Journal of Primary Prevention, 15, 99-103.
- Walsh, M. (1996). The impact of health and safety legislation on the workplace. *People and Performance, March*, 22-26.
- Warr, P. (1994). A conceptual framework for the study of work and mental health. Work and Stress, 8, 84-97.
- Warr, P., & Parry, G. (1982). Paid employment and women's psychological well-being. Psychological Bulletin, 91, 498-516.
- Wells, J.E., Bushnell, J.A., Hornblow, A.R., Joyce, P.R., & Oakley- Browne, M.A. (1989). Christchurch psychiatric epidemiology study, part 1: Methodology and lifetime prevalence for specific psychiatric disorders. Australian and New Zealand Journal of Psychiatry, 23, 315-326.
- White, S.L. (1983). Recent trends in occupational mental health: An overview.

 New Directions for Mental Health Services, 20, 3-14.
- Williams, S. (1994). Ways of creating healthy work organisations. In C.L. Cooper, & S. Williams (Eds), Creating healthy work organisations (pp. 7-25). Chichester: John Wiley & Sons.

- Wolfe, R., Parker, D., & Napier, N. (1994). Employee health management and organisational performance. Journal of Applied Behavioral Science, 30, 22-42.
- Yandrick, R.M. (1996). A strategy for managing behavioural problems at work. HR Magazine, 41, 150-160.
- Zeier, H. (1994). Workload and psychophysiological stress reactions in air traffic controllers. *Ergonomics*, 37, 525-539.
- Zolkos, R. (1994). Depression can take a costly toll on business. *Business Insurance*, 28, 16-17.

Appendix A

A SURVEY OF MENTAL HEALTH IN THE WORKPLACE: A HUMAN RESOURCE PERSPECTIVE

PLEASE READ THE INFORMATION OVERLEAF BEFORE STARTING

Please read the following information carefully before starting.

The following information will assist you in making informed responses to the questions that follow.

OCCUPATIONAL MENTAL HEALTH refers to a major theme within the broader topic of occupational health and well-being. It is an area that is concerned with the work environment and the way in which it affects employee thought, emotion and behaviour. It addresses the way in which the workplace influences personal well-being and job performance. Occupational mental health also acknowledges variables external to the workplace that can be brought into the work environment to shape an individual's life as an employee.

Please read the instructions carefully in the shaded boxes at the beginning of each section. Select the most appropriate answer/s and make any comments you may have in the spaces provided.

YOUR ANSWERS ARE CONFIDENTIAL

YOUR ANONYMITY IS GUARANTEED

SECTION 1

Please select the most appropriate answer/s to the following questions by placing a tick in the corresponding box. Please also make any comments you may have in the spaces provided.

	n organisation h							- 1
		ave a respons	sibility to address	mental he	alth issues	?		V
Yes	□1							
No	□2							
Please	justify your resp	oonse:						
							_	
							_	
							_	
How pre	evalent is poor r	nental health i	in the New Zealar	nd workpla	ice?			V
Very Pı	revalent				Not	Prevalent /	At All	
	1	2	3	4				
						5		
				0		5		
						0		
To what			□ es problems in th			0	ach item).	
To what			es problems in th Major	□ e workplad		□ e box for ea	ach item). Inor	
To what			es problems in th	□ e workplad	ce? (Tick on	□ e box for ea Mi	77.0	
To wha			es problems in th Major	□ e workplad		□ e box for ea Mi	nor	
To what	t extent are the		es problems in th Major Problem	□ e workplad	ce? (Tick on	□ ne box for ea Mi Pr	nor oblem	V3
Alcohol	t extent are the		es problems in th Major Problem 1	e workplac	ce? (Tick on	© box for each Mi	nor oblem 5	V3

Yes	□ 1
No	
Please	e justify your response:
	s/are the most appropriate person/s to intervene and address workplace mental health

Office Use

SECTION 2

This section addresses work and non-work factors that may play a role in the development of poor mental health. Please select the most appropriate answer/s by placing a tick in the corresponding box.

To what extent do the following WORK box for each item).	factors impac	t on emplo	yee menta	I health? (Tick one	Office
oral rate of the action of the state of the						
	Very High				No	
	Impact 1	. 2	3	4	Impact 5	
Factors intrinsic to the job					95	
Poor physical working conditions						\
Shiftwork						\
Physical work danger			0			1
Work overload						V1
Work underload						V-
Technological change at work						V-
Lack of task variety						V-
Job satisfaction						V.
Employee-job fit						V.
Role in the Organisation						
Organisational conflict						v
Role conflict						V
Role ambiguity						V
Lack of control over work						v
Lack of autonomy						V
Responsibility for employees						v
Career development						
Lack of job mobility						v
Inadequate training						v
Lack of pay advancement prospects						v
Job insecurity						v
Overpromotion						l v

						Office Use
	Very High				No	1
	Impact				Impact	
	1	2	3	4	5	
Underpromotion						V27 □
Organisational restructuring						V28 🗌
Relationships at work		9.				
Conflict between employee and						
organisational values						V29 🗌
Ineffective interpersonal work relations						V30 🗌
Ineffective group processes						V31 □
Lack of social support from members						
of the organisation						V32 □
Organisational structure and climate						
Office politics						V33 □
Organisational change						V34 □
Lack of participation in decision						
making processes						V35 🗌
Lack of feedback and recognition						V36 □
Unclear organisational structure						V37 □
To what extent do the following NON-W	ORK factors i	mpact on	occupation	al mental	health?	
(Tick one box for each item).						
	Very High				No	
	Impact				Impact	
	1	2	3	4	5	
Financial problems						V38 □
Family problems						V39 □
Divorce/separation						V40 □
Bereavement	0					V41 □
Immigration						V42 □
Individual coping ability						V43 🗆

6.

							Office Use
Ve	ry High	1				No	
In	mpact					1	
	1		2	3	4	5	
Lack of family support							V44 □
Dual career stress (both partners working)							V45 □
Bringing work stress into the home							
environment		•					V46 🗌

SECTION 3

This section addresses individual and organisational level outcomes of poor occupational mental health. Please select the most appropriate answer by placing a tick in the corresponding box. Tick one box for each item.

whom you work?						1
	Very			Not		
	Prevalent			Preva	lent At All	
	1	2	3	4	5	
Anxiety						
Depression						
Chemical dependency						
Alcohol abuse						
Burnout						
Other (Please specify)						
						1
To what extent does poor employ outcomes?	□	□ ealth impact	upon the fol	□ lowing orga	□ nisational	
To what extent does poor employ	vee mental he	ealth impact			nisational No	
To what extent does poor employ	vee mental he Very High Impact	ealth impact	upon the fol	lowing orga	nisational No Impact	
To what extent does poor employ	vee mental he	ealth impact			nisational No	
To what extent does poor employ	vee mental he Very High Impact	ealth impact	upon the fol	lowing orga	nisational No Impact	
To what extent does poor employ outcomes?	vee mental he Very High Impact 1	ealth impact	upon the fol	lowing orga	nisational No Impact 5	
To what extent does poor employ outcomes? Productivity quality	Very High Impact 1	ealth impact 2	upon the fol	lowing orga 4	No Impact 5	
To what extent does poor employ outcomes? Productivity quality Productivity quantity	Very High Impact 1	ealth impact 2	upon the fol	lowing orga	No Impact 5	
To what extent does poor employ outcomes? Productivity quality Productivity quantity Absenteeism	Very High Impact 1	ealth impact	agon the fol	d 4	No Impact 5	
To what extent does poor employ outcomes? Productivity quality Productivity quantity Absenteeism Turnover	Very High Impact 1	ealth impact	ayon the fol	4 □ □ □	No Impact 5	

9. To what extent does poor mental health impact upon the following individual outcomes?

	Very High	n			No	
	Impact				Impact	
	1	2 .	3	4	5	
Productivity						V59 🗌
Efficiency						V60 🗌
Creativity				D		V61 🗌
Decision making ability						V62 🗌
Interpersonal relations skills				0		V63 🗌
Physical health						V64 🗌
Coping ability						V65 🗌
Morale						V66 🗌
Ability to co-operate						V67 🗌
Job satisfaction						V68 🗌
Work commitment	П	П	П	П	П	V60 🗆

SECTION 4

This section addresses work-based intervention strategies that focus on mental health issues in the workplace. Please select the most appropriate answer/s by placing a tick in the corresponding box. Please also make any comments you may have in the spaces provided.

10. The following items represent various work-based intervention strategies. Please provide responses in the spaces provided under the corresponding headings.

Please specify if any of the following interventions have ever been implemented in the organisation/s with whom you work.

If any of the interventions HAVE been implemented, please specify the length of time in operation.

If any of the interventions HAVE NEVER been implemented, would you consider implementing any of the interventions in the future?

					Offic	e Use
	Have	Time in	Will			
	Implemented	Operation	Implement			
Employee assistance programme				70	71	72
In-house counseling				73	74	75
Cognitive counseling approaches				76	77	78
Consultation arrangements with outside						
mental health providers				79	80	81
Education programmes on anxiety				82	83	84
Exercise programme				85	86	87
Relaxation techniques training				88	89	90
Education programmes on depression				91	92	93
Goal setting				94	95	96
Interpersonal skills training		,		97	98	99
Education programmes on alcohol abuse				100	101	102
Education programmes on chemical dependency				103	104	105
Stress management training				106	107	108
Problem solving training				109	110	111
Education programmes on mental well-being						
in general				112	113	114
Other (Please specify)						
		-				

of the mentioned intervention ork, please go to QUESTION	ons HAVE NEVER bee	n implemen	ted in the o	rganisation/s		
ork, please go to QUESTION				gamounom	s with whom	
and the second of the second and the second of the second	12.					
For those interventions that that generally have had according	70	V. 27				V115 🗌
Operating level employees						
First line supervisors						
Middle management						
Top level management						
Full-time employees						
Part-time employees						
Other (Please specify)	-					
QUESTION 12.						
Please comment on the rea	son/s why any of the ir	terventions r	nentioned in	Question 10	have	
never been implemented in				Quodion 10	navo	

Please indicate the extent to	20 5070			rventions as	being	
Please indicate the extent to	20 5070			rventions as	being	
	20 5070			rventions as Totally		
	ressing occupational r Very Effect	nental health		Totally Ineffec	itive	
	ressing occupational r	nental health		Totally		
	ressing occupational r Very Effect	nental health.		Totally Ineffec	itive	V116 🗌
EFFECTIVE in terms of add	ressing occupational r Very Effect	nental health.	3	Totally Ineffec	itive 5	V116
EFFECTIVE in terms of add	Very Effect amme	nental health.	3	Totally Ineffec 4	tive 5	
EFFECTIVE in terms of add Employee assistance progra In-house counseling	Very Effect amme	nental health.	3	Totally Ineffect 4	tive 5	V117 🗆
Employee assistance progratin-house counseling Cognitive counseling approach	Very Effect amme	nental health.	3	Totally Ineffect 4	tive 5	V117 🗆
Employee assistance progration in the counseling Cognitive counseling approach Consultation arrangements	Very Effect 1 amme aches	nental health.	3	Totally Ineffect 4	tive 5	V117
Employee assistance progration in the counseling Cognitive counseling approach Consultation arrangements mental health providers	Very Effect 1 amme aches	nental health.	3	Totally Ineffect 4	tive 5	V117
Employee assistance progration in the counseling Cognitive counseling approach Consultation arrangements mental health providers Education programmes on a	Very Effect 1 amme aches with outside	nental health.	3 0 0	Totally Ineffect 4	tive 5	V117

Education programmes on depression

							Office Use
	Very			Total	ly		
	Effective			Ineff	ective		
	1	2	3	4	5		
Goal setting					0		V124
Interpersonal skills training							V125
Education programmes on alcohol abuse							V126
Education programmes on chemical	٠						
dependency							V127
Stress management training							V128
Problem solving training							V129
Education programmes on mental							
well-being in general							V130
The following items represent various of Please provide responses in the spaces. Please specify if any of the following interver organisation/s with whom you work to addr. If any of the interventions HAVE NEVER be implementing any of the interventions in the	entions have ress occupa een impleme e future to a	under the e ever bee tional men	correspon en implemen ntal health i	nted in the ssues.	ings.		
	17.	nave mplemen	tod		lement		
Changes in organisational structure	,		iteu	mp		131	132
Job redesign						133	134
Revision of selection and placement					u .		197
procedures		D			0	135	136
Alteration of physical working conditions						137	138
Establishment of flexible work schedules		0				139	140
Encouragement of participative management	ent				0	141	142
Employee involvement in career development						143	144
Provision of social support and feedback						145	146

14.

If any of the above preventative interventions HAVE NEVER been implemented in the organisation/s with whom you work, please go to QUESTION 15.

Office	Use

QUESTION 15.						
Please comment on the reason/s why any of the					n	
Question 14 have never been implemented in t	he orga	anisation/s	with whom	you work.		
Please indicate the extent to which you regard	the foll	owing orga	nisational i	ntervention	s as	
being EFFECTIVE in terms of addressing occur	pationa	al mental h	ealth.			
V.				Total	h.,	
	ery ffective	9			ective	
_	1	2	3	4	5	
Changes in organisational structure	0	0		0		V147
Job redesign						V148
rest field in April 2000 (101 - D eb)		u	U	u		1.40
Revision of selection and placement	п	П	n	П	П	V149
procedures						ROBVIES
Alteration of physical working conditions						V150
Establishment of flexible work schedules						V151
Encouragement of participative management						V152
Employee involvement in career development						V153
Provision of social support and feedback						V154
Please indicate which of the following intervent			200	-		
EFFECTIVE in terms of addressing occupation	al men	tal health.	TICK one b	ox for each	item).	
Mos	t			Le	ast	
Effe	ctive			Ef	fective	
	1	2	3	4	5	
Interventions aimed at improving		125		(2)		535639400
the organisational environment						V155
Interventions aimed at training individuals						
30.00000000000000000000000000000000000						

		***						1
		Most				Least		1
		Effect		7756		Effect		
			1	2	3	4	5	
Interve	entions aimed at treating	g employees						
in dist	ress							V157
	e comment on any othe of addressing occupati		3	uld regard	l as being	EFFECTIVE in		
terms		onai mentai neatii.						
Do you	u think that surveys to	ascertain perceived	employ	ee needs	for employ	ree assistance		V158
A	imme services is a wor		citipioj	00 110000	ioi ompioj	oo addiistanida		
								1
Yes	□1							
No	□2							
Please	e justify your response:						-	
Please	e justify your response:						-	
Please	e justify your response:							
Please	e justify your response:							
Please	e justify your response:							
Please	e justify your response:							
Haves	surveys ever been implyed employee needs for	emented in the orga	anisatio	n/s with w	rhom you v		in	V159
Haves	surveys ever been impl	emented in the orga	anisatio	n/s with w	rhom you v		in	V15

SECTION 5

Please tick one box to indicate your response to each of the following statements. (Tick one box for each item).

	SA = Strongly Agree						Office Use
	A = Agree						1
	CD = Cannot Decide						1
	D = Disagree						
	SD = Strongly Disagree	850					
		SA	Α	CD	D	SD	
the con		1	2	3	4	5	
21.	Rather than focusing exclusively on what the organisation can provide for the employee to help them cope more effectively, organisations should consider what they can do to eliminate or reduce employee stressors.	0				0	
22.	Employers and employees both benefit when they take proactive measures to detect and treat				0	٥	V160 🗌
	mental health problems.						V464
23.	Investing in employees' mental health cannot increase organisational effectiveness.						V161 🗆
24.	Investing in employees' mental health can decrease costs associated with outcomes such as absenteeism and decreased productivity.						V162
25.	Organisations don't have a responsibility and business interest in rehabilitating employees with mental health problems.						V163 🗌
26.	The failure to attend to occupational mental health						V164 🗌
20.	has substantial direct economic costs and lost output costs.						
27.	There is no return on the human resource investment made in mental health education.			0			V165 🗌
28.	There is no return on the human resource invest- ment made in mental health treatment.	0		0			V166 🗆
29.	Prevention and treatment activities should be integrated into a comprehensive approach to promote employee overall well-being.	0					V167 🗆
							V168 🗆

							Office Use
		SA	Α	CD	D	SD	
		1	2	3	4	5	
30.	Training managers in work-related causes of mental health problems and the necessary control measures is not a worthwhile exercise.					П	
31.	Seeking any sort of mental health care stigmatises employees.	D	П				V169 L
32.	An organisation's structure and characteristics do not impact upon employee mental health.						V170 L
33.	Managers need not know the relevant facts about mental health.						V171 U
34.	Managers should understand their potential to influence employee mental health.			0			V1/2
35.	Managers do not have a responsibility to recognise employees in need of referral for mental health problems.			П	П	0	V173 🗆
36.	Mental health should not be ignored when considering an individual's total well-being.	0					V174 L
							V475 🗆

SECTION 6

This section is designed to help in the classification of your answers and to make statistical comparisons. Please select the most appropriate answer by placing a tick in the corresponding box. Please also make any comments you may have in the spaces provided.

What is the highest level of education was studied at the highest le					Office U
		•			
		Subject Area			V176
Secondary School Certificate	□1				
Diploma	□2				
Bachelors Degree	□3				
Honours Degree	□4				
Masters Degree	□5				
Doctorate	□6				
Other (Please specify)					
				- - -	
				-	
Please specify your age.		-		-	V177
Please specify your age. Are you?		-		-	V177 V178
		-		-	
Are you?	□1 □2			-	
Are you?	□2	practicing as a Human F	Resource	-	V178
Are you? Male Female Please specify the length of time tha	□2	practicing as a Human F	Resource	-	V178
Are you? Male Female Please specify the length of time that practitioner.	⊡2 It you have been p	practicing as a Human F	Resource		
Are you? Male Female Please specify the length of time that practitioner. Less than 5 years	⊡2 It you have been p ⊡1	practicing as a Human F	Resource		V178

	are employed as a Hu TON 42.	man Resource practitioner within an organisation, please go to	ffice Use
If you a	are a consultancy-bas	ed Human Resource practitioner, please go to QUESTION 43.	
QUEST	TON 42.		
A.	Please specify the nu employed.	mber of full-time employees in the organisation within which you are	V180 🗌
		*	
	Under 20	□ 1	
	20-39	□2	
	40-59	□з	
	60-79	□4	
	80 and over	□5	
В.	Please specify the nu employed.	mber of part-time employees in the organisation within which you are	V181 🗌
	Under 20	□1	
	20-39	□2	
	40-59	□3	
	60-79	□4	
	80 and over	□5	
C.	Please specify the inc	ustry within which you are employed.	V182 🗌
	Financial	□1	
	Education	□2	
	Insurance	□3	
	Advertising	□4	
	Manufacturing	□5	
	Service	□6	
	Hospitality	D7	
	Construction	□8	
	Medical	D9	
	Government	□10	
	Other (Please specify		

D.	Does the organisation within which you are	employ	ed have	the follow	ving?	Office Use
	Occupational Mental Health Policy	Yes	□1	No	□2	V183
	Alcohol/Substance Abuse Policy	Yes	□1	No	□2	V184 🗌
	Employee Health and Safety Policy	Yes	□1	No	□2	V185
E.	If you answered YES to any of the above p	olicies, is	s the po	icy forma	al and written.	
	Occupational Mental Health Policy	Yes	□1	No	□2	V186 🗌
	Alcohol/Substance Abuse Policy	Yes	□1	No	□2	V187 🗌
	Employee Health and Safety Policy	Yes	□1	No	□2	V188 🗌
QUEST	ION 43.					
A.	Please specify the average number of full-t consult.	ime emp	loyees i	n the orga	anisations to whom you	V189 🗌
	Under 20	□1				
	20-39	□2				
	40-59	□3				
	60-79	□4				
	80 and over	□5				
В.	Please specify the average number of part- consult.	time em	ployees	in the org	ganisations to whom you	V190 🗌
	Under 20	□1				
	20-39	□2				
	40-59	□3				
	60-79	□4				
	80 and over	□5				

						Office Use
C.	Please specify the industry/industries	to whom you	consult	. (Tick mo	ore than one box if applicable).	V191 🗆
	Financial					
	Education					
	Insurance					
	Advertising		1.4			
	Manufacturing					
	Service					
	Hospitality					
	Construction					
	Medical					
	Government					
	Other (Please specify)	e 				
	consult does have one of the following	g and anothe Yes	r does i	not, pleas No	e tick both boxes). □2	V192 🗌
	Alcohol/Substance Abuse Policy	Yes	□1	No	□2	V193 🗌
	Employee Health and Safety Policy	Yes	□1	No	□2	V194 🗆
E.	If the organisations to whom you cons and written ? (If one of the organisation and another does not, please tick both	ons to whom				
	Occupational Mental Health Policy	Yes	□1	No	□2	V195
	Alcohol/Substance Abuse Policy	Yes	□1	No	□2	V196
	Employee Health and Safety Policy	Yes	□1	No	□2	V197 🗆

		Office
	s a Human Resource practitioner, are you equipped to address the workplace mental hea sues that have been raised in this questionnaire?	alth V19
Ye		
No	0 □2	
Ple	lease justify your response:	
3		
-		
9		_
Wi	hat training would equip you, as a Human Resource practitioner, to address the workpla	ace
m	nental health issues that have been raised in this questionnaire?	
_		
_		_
-		

THANK-YOU FOR YOUR TIME IN PROVIDING VALUABLE RESPONSES TO THIS QUESTIONNAIRE.

PLEASE RETURN THE QUESTIONNAIRE IN THE ENVELOPE PROVIDED.



ALBANY

DEPARTMENT OF PSYCHOLOGY

A SURVEY OF MENTAL HEALTH IN THE WORKPLACE: A HUMAN RESOURCE PERSPECTIVE

INFORMATION SHEET

My name is Nadine Ripley, a Massey University postgraduate student, currently working on a thesis for the purpose of obtaining a Masters degree in Psychology. The topic of my Masterate thesis is mental health in the workplace. As an exploratory piece of research, it includes an exploration into Human Resource practitioners' perceptions concerning various issues which revolve around the subject of occupational mental health.

The study addresses an area that has been largely neglected in New Zealand research literature, and therefore, it is hoped that the research will provide valuable information, particularly to human resource practitioners within the New Zealand context.

The supervisor of my research is Dr Hillary Bennett, who is a full-time lecturer in the Psychology Department at Massey University.

The research involves the use of a questionnaire. The Institute of Personnel Management New Zealand Incorporated have been instrumental in the recruitment of potential participants to my study. For the purpose of the study, all Wellington and Auckland based members to the Institute were placed in alphabetical order. Every second name was selected and in this way, you have been selected as a potential participant to the study. In accordance with the Privacy Act 1993, I did not have access to the Institute's data base and was not involved in the mailing of the questionnaires. As a result, your identity remains anonymous to myself and the research.

I would like to invite you to participate in the study by completing the questionnaire that accompanied this Information Sheet and returning it in the free-post envelope provided. The time required to complete the questionnaire is approximately fifteen to twenty minutes.

You have the right to decline to take part in this study. If you should agree to take part in the study by completing the questionnaire, you have the right to withdraw from the study at any time and to refuse to answer any particular questions at any time. It is assumed that filling in the questionnaire implies consent. A summary of the research will be available to you via the Institute of Personnel Management New Zealand Incorporated.

The information that you give will be confidential to the research and any publications resulting from it. The questionnaires are coded and therefore, your anonymity is assured.

You have the right to ask questions about the study at any time during participation. You have the right to be given access to a summary of the findings of the study when it is concluded and you have the right to participate in the study under the conditions set out in the Information Sheet.

Both my supervisor and myself may be contacted at the following telephone number: (09) 443 9700. Extension 9365.

Thank-you in advance for your participation.

Nadine Ripley (researcher)

Dr Hillary Bennett (supervisor)

Subject areas of highest level of education achieved

Appendix B

Category	Frequency	% of category	% of total (n=135
Diploma (n=29)			
Human resource management	18	62	13
Business studies	5	17	4
Teaching	2	7	1
Nursing	1	3	1
Occupational health and safety	. 1	3	1
Executive management	1	3	1
Psychology	1	3	1
	29	98	21
Bachelors Degree (n=59)			
Psychology	15	25	11
Arts	15	25	11
Human resource management	5	8	4
Business studies	5	8	4
Social sciences	3	5	2
Mechanical engineering	2	3	1
Public administration	2 2 2	3	1
Mathematics	2	3	1
Agricultural economics	2	3	1
Commerce	2		1
Information technology	2	3 3 2 2	1
Nursing	1	2	1
Law	1	2	1
Science	1	2	1
Education	1	2 2	1
	59	97	41
Honours Degree (n=8)			
Psychology	5	63	4
Management	2	25	1
Marketing	1	13	1
-	8	101	6
Masters degree (n=36)			
Psychology	14	39	10
Business studies	7	19	5
Human resource management	6	17	4
Marketing	1	3	1
History	1	3	1
Education	1		1
Mathematics	1	3	1
Security and defence studies	1	3	1
Commerce	1	3	1
Chemistry	1	3	1
Political science	1	3	1
Communications	1	3	1
	36	102	25
Doctorate (n=3)			
Psychology	1	33	1
Chemistry	1	33	1
Education	1	33	1
transcription (INCO CONTROL	3	99	2

Appendix C

Table C1

Industries in which internal Human Resource practitioners are employed (n=19)

Category	Frequency	%	
Computing	3	16	
Distribution/marketing	. 3	16	
Professional services	2	11	
Engineering	2	11	
Contracting	1	5	
Consulting and design	I	5	
Tourism	Ĩ	5	
Ship repair	1	5	
Health and safety management	I	5	
consultancy			
Media/entertainment	I	5	
Multinational	I	5	
Legal firm	1	5	
Educational publishing	1	5	
	19	99	

Table C2

<u>Industry/industries to whom external Human Resource practitioners consult</u>
(n=13)

Category	Frequency	%
Information technology	3	23
Retail	2	15
Employment	2	15
Human resources	· I	8
Contractors	1	8
Engineering	1	8
Professional services	1	8
Wide cross-section	1	8
Ship repair	1	8
	13	101

Appendix D

Secondary and Tertiary Interventions that have been implemented in the respondents' organisation/s (n=30)

Category	Frequency	%	
Secondary Interventions			
Change management workshops	5	17	
Occupational Overuse Syndrome prevention	2	7	
Leadership programme	2	7	
Health programme	2	7	
Health and safety training	1	3	
Anti harassment programme	1	3	
Personal effectiveness training	1	3	
Belief management	1	3	
Corporate weight watchers	1	3	
Employee involvement workshop	1	3	
Facilitation skills workshop	1	3	
Affects of shiftwork programme	1	3	
Team building	1	3	
Meditation	1	3	
	21	68	
Tertiary Interventions			
Industrial chaplaincy	3	10	
Full occupational health service	1	3	
Fully paid medical insurance	1	3	
Peer support programme	1	3	
Career counselling	1	3	
Counselling for co-workers of distressed			
employees	1	3	
Counselling for employees surviving disaster	1	3	
	9	28	

Appendix E

Table E1

Cross-tabulation of gender and employee job fit as a Work Factor

Frequency Row Pct %	Missing data	Very high impact	High impact	Moderate impact	Low impact	No impact	Tota
Male	0 0.00	12 18.46	35 53.85	8 12.31	7 10.77	3 4.62	65
Female	2 2.04	29 29.59	41 41.84	21 21.43	5 5.10	0 0.00	98
Total	2	41	76	29	12	3	163

Table E2

Cross-tabulation of gender and immigration as a Non-Work Factor

Frequency Row Pct %	Missing data	Very high impact	High impact	Moderate impact	Low impact	No impact	— Tota —
Male	2 3.08	3 4.62	20 30.77	25 38.46	11 16.92	4 6.15	65
Female	8 8.16	20 20.41	35 35.71	30 30.61	4 4.08	1 1.02	98
Total	10	23	55	55	15	5	163

Table E3

Cross-tabulation of gender and coping ability as an Individual Outcome of poor employee mental health

Frequency Row Pct %	Missing data	Very high impact	High impact	Moderate impact	Low impact	Tot
Male	1 1.54	13 20.00	31 47.69	14 21.54	6 9.23	6
Female	2 2.04	29 29.59	56 57.14	10 10.20	1 1.02	9
Total	3	42	87	24	7	— 16

Table E4

Cross-tabulation of age group and role conflict as a Work Factor

Frequency Row Pct %	Missing data	Very high impact	High impact	Moderate impact	Low impact	No impact	— То
20-29	1	7	9	8	2	0	2
years	3.70	25.93	33.33	29.63	7.41	0.00	
30-39	0	9	33	4	3	0	
years	0.00	18.37	67.35	8.16	6.12	0.00	
40-49	0	8	33	8	3	0	_
years	0.00	15.38	63.46	15.38	5.77	0.00	
50-69 years	0.00	1 3.85	19 73.08	4 15.38	0 0.00	2 7.69	_ 2
Total	1	25	94	24	8	2	— 15

Table E5

Cross-tabulation of age group and work overload as a Work Factor

Frequency Row Pct %	Missing data	Very high impact	High impact	Moderate impact	No impact
20-29 years	0.00	10 37.04	16 59.26	1 3.70	0.00
30-39	0	21	27	1	0
years	0.00	42.86	55.10 ·	2.04	0.00
40-49	0.00	16	30	6	0
years		30.77	57.69	11.54	0.00
50-69	0.00	9	9	7	1
years		34.62	34.62	26.92	3.85
Total	0	56	82	15	1

Table E6

<u>Cross-tabulation of age group and absenteeism as an Organisational Outcome of poor employee mental health</u>

Frequency Row Pct %	Missing data	Very high impact	High impact	Moderate impact	Low impact	No impact	_ :
20-29	0	11	9	5	1	1	
years	0.00	40.74	33.33	18.52	3.70	3.70	
30-39	0	19	20	6	3	1	
years	0.00	38.78	40.82	12.24	6.12	2.04	
40-49	1	10	22	14	5	0	
years	1.92	19.23	42.31	26.92	9.62	0.00	_
50-69	0	9	6	2	7	2	
years	0.00	34.62	23.08	7.69	26.92	7.69	
Total	1	49	57	27	16	4	1

Table E7

Cross-tabulation of age group and turnover as an Organisational Outcome of poor employee mental health

Frequency Row Pct %	Missing data	Very high impact	High impact	Moderate impact	Low impact	No impact	— Т
20-29	0	6	10	10	1	0	
years	0.00	22.22	37.04	37.04	3.70	0.00	
30-39	0	12	22	12	1	2	=
years	0.00	24.49	44.90	24.49	2.04	4.08	
40-49	2	7	19	15	7	2	
years	3.85	13.46	36.54	28.85	13.46	3.85	
50-69	0	4	7	4	10	1	-
years	0.00	15.38	26.92	15.38	38.46	3.85	
Total	2	29	58	41	19	5	1:

Table E8

<u>Cross-tabulation of job description and organisational conflict as a Work Factor</u>

Frequency Row Pct %	Missing data	Very high impact	High impact	Moderate impact	Low impact	No impact	
Internal HR	1 0.94	15 14.15	47 44.34	36 33.96	7 6.60	0 0.00	
External HR	1 2.38	6 14.29	27 64.29	6 14.29	1 2.38	1 2.38	
Both	0 0.00	6 42.86	4 28.57	4 28.57	0 0.00	0 0.00	
Total	2	27	78	46	8	1	_