TEACHER BURNOUT:

A STUDY OF OCCUPATIONAL STRESS AND BURNOUT IN NEW ZEALAND SCHOOL TEACHERS

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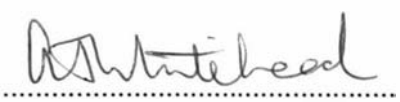
DECLARATION

I declare that this thesis represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualification.



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Abstract

This thesis addresses the internationally recognised problem of stress and burnout in teachers, especially as this affects primary school teachers. The study included three phases. The first phase sought to examine the effects of stress since the new education administration changes, and to look at teachers' perceptions of stress, the work situations causing stress and the coping strategies that they found most helpful. The second phase of the study sought to identify levels of burnout using the Maslach Burnout Inventory (comparing them with American counterparts). Finally, the third phase of the study looked at differences in the work environment of both high and low burnout schools.

A multidimensional research approach was selected as a framework for analysis. The limitations of prior research on teacher burnout suggests that the use of multiple methods of information gathering would prove to be a most valid approach, allowing for different perspectives in understanding the complexity of burnout within the school organisation. A range of qualitative and quantitative data analyses and information gathering procedures were used. This included a stress questionnaire, MBI surveys, staff interviews, and observations.

Results from the study confirmed that teachers report high level of stress in New Zealand schools and that there are noticeable differences between low stress and high stress schools in terms of their administrative, social and physical environments. It is recommended that teacher burnout be seen not only as an individual problem, but also as an organisational problem and that effective strategies on administrative, social and physical levels must be put in place in order to maintain healthy, low burnout school environments.

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CHAPTER ONE

1. 0 Introduction - An Overview of the Study

Teaching within the organisational context of a school places staff with diverse personalities and varying degrees of professional skill and training into situations that require frequent interaction and co-operation. The environment of the school is frequently demanding, requiring workers to be emotionally involved with students as well as being mentally and physically challenged. In New Zealand, education has been subject to extensive changes and with rapid technological advances our school environments are struggling to adapt and keep up with new political and administrative demands. (Harker et al, 1998). Not only is there increasing criticism via the media, but there are increasing financial problems in our schools which provide the added burden of cost containment which is leading to unclear goals and long term vision.

Criticism from the community and media has added to the conflicts and ambiguities for both teachers and administrators. Recent and continuing reports of increasing stress and greater demands placed on teachers have coincided with and been attributed to the implementation of a new system of educational administration (Manthei & Gilmore 1994). This system was introduced in New Zealand in 1988 with the report of the Task Force to Review Education Administration (Picot Report, 1988). Since the education changes of 1989, the government has been reforming the school curriculum as part of its achievement initiative policy, with every area of the curriculum being revised. As well as new accountability measures requiring increased assessment levels, every year since 1994 a new curriculum area has been implemented. The timelines to introduce and implement the new curricula has put much stress on teachers (Mitchell, McGee, Moltzen & Oliver, 1993). For many years, the New Zealand Education Institute (NZEI) has stated that teacher workloads are unacceptable and research has shown that the pressure to keep up with assessment requirements and paper work has been at tremendous personal cost to teachers. Along with these changes has been an insistence that teachers demonstrate excellence in their teaching so that students produce positive learning outcomes. As Harker (1998) has noted, this has fuelled unrealistic expectations about what teachers can and should accomplish. Many anecdotal reports amongst primary school teachers have suggested that participation in school organisations has become increasingly stressful and is continuing to have profound effects on teachers physical health and mental well-being.

It is against this background that this exploratory study was conducted. It first examined perceptions of stress and burnout in the school workplace and focused on finding aspects

of their environment that contribute to high and low burnout among teachers. Another reason for the pursuit of this study was the informal comments made by personal friends who were teachers. They complained about the personal strains of teaching, the long hours and large workloads which they attributed to the changes in education policy and were obliged to implement.

The scope and dramatic change in education has been implemented at such speed that harmful, extreme effects are being experienced (Gibbs, 1994), and are having severe consequences not only the individuals concerned but for the school and their students. These consequential negative effects have been described by Cooper and Marshall (1976) as occupational stress and burnout.

The remainder of this chapter will introduce the specific components of the study under consideration, each of which will be detailed further in subsequent chapters. Firstly, the educational administration changes will be discussed within a political and ideological context. Secondly, the effects of these changes on the school organisation will be outlined followed by a rationale for the present study and finally, the purpose of the present study.

1. 1 Background Influences - Changes in Educational Administration

The introduction of new policies associated with educational reform has been rapid and successive in New Zealand and has had major consequences for administrators and teaching staff in New Zealand schools. These education reforms were part of the government's desire to appease public concern about the quality of teaching and to provide more accountability and performance assessment. In 1989 the New Zealand government introduced major changes to the administration of education, its organisation, goals and curricula and the means used to evaluate success. They were characterised by a substantial devolution of responsibility and authority from the centre to the individual learning institutions, which were to be governed by boards of trustees working within the framework of charters negotiated with the Ministry of Education, funded through bulk grants and monitored by an independent review agency (Mitchell, McGee, Moltzen & Oliver, 1993). The origins of these reforms were in the 1988 report of a task force, referred to as the Picot Report, which had been set up by the then Labour Government to review the administration of education in New Zealand, and in the subsequent White Paper, Tomorrow's Schools (Lange, 1988a).

The 1970s and 1980s saw major changes in New Zealand education along with a growing feminist movement, a Maori renaissance and calls for greater community

involvement in decision making and more awareness of bicultural approaches (Alcorn, 1995). The education reforms were part of massive public sector changes which occurred at the level of central government which included the corporatisation and privatisation of state trading seen as a way of promoting economic growth and as a more efficient means of allocating and using scarce resources. These changes made increasingly stressful demands on schools placing further responsibility and accountability on teachers and administrators which have culminated in a great deal of stress. Commentators such as Codd (1993a) state that these changes were part of a movement set out to maximise individual choice within a deregulated social environment and to minimise state imposed responsibilities, duties and obligations. Other changes included new systems of appointing government employees, cuts in government programmes, changes in industrial relations practices and greater emphasis on equity, accountability and performance assessment. These changes were to transfer over to the education sector publicly articulated concern about the quality of teaching and more emphasis on desirability of consumer choice and professional accountability. What lay behind the government's major restructuring may be seen as a response to fiscal restraint and to the complexity of society and the challenges schools were facing in meeting the expectations of constantly changing communities (Ballard, 1990). Nash (1991) states however, that the reforms were an attempt to strengthen state control in certain essential areas while satisfying popular demands for community participation. In particular, the education reforms were part of the government's desire to appease public concern about the quality of teaching and to provide more accountability and performance assessment. As a consequence, the pressure and stress felt by teachers and administrators have been highlighted by frequent media reports which have continued from the 1989 reforms to the present.

According to Barry (1986) the 'new' market liberalism was a rival of classic liberalism with its absence of individual freedom, public choice and minimal government. The resurgence of market liberalism was accompanied by adherence to monetarist economic policies and, as with the United States of America under the Reagan administration and Britain under the Thatcher government, the Lange/Douglas government began to roll back the state (deregulation, privatisation) to foster a climate of competition ('enterprise culture') and to set aside most of the traditional concerns for social justice in the political reform agenda (Codd, 1993a).

Critics of the education reforms have tended to fall roughly into two groups. Leftist liberal writers have drawn attention to the negative aspects of the right wing response which have included imposing greater control over the purpose and control of education

through charters, mission statements, quality assurance, accountability, professional status, measurement of outcomes and curriculum guidelines. The new right (which includes the New Zealand Business Round Table, the New Zealand Treasury, sectors of the media and sectors of the National Party) in contrast drew attention to the view that education should be more competitive and efficient, with the role of the state being diminished (Grace, 1991).

Irrespective of left and right wing critiques, the education reforms have brought fundamental change to the structure of the education system, in two major ways (Codd, 1993a). Firstly, there has been a managerial ideology imposed on schools which has resulted in such approaches as bulk funding, individual employment contracts and merit pay, and, secondly, educational administrators have had to surrender their traditional commitment to the values of universal educational opportunity and social justice, and pursue the alternative goals of competition and individual choice. The effects of this ideology and its consequential education reforms have had far reaching implications for New Zealand schools. These will now be addressed in 1.2.

1. 2 Effects on the School Organisation

A consequence of the 1989 reforms has been a major shift in responsibility for the governance and management of learning institutions away from the central Department of Education to the institutions themselves. This in turn required those in schools to redefine their responsibilities and their lines of accountability. Principals have had to accept new roles which include managerial responsibilities that are different from past practices. Teachers are required to document and evaluate more carefully the quality of their classroom programme in relation to their school charter. Senior and middle management are now required to spend significant time on administrative duties associated with the reform, with correspondingly less time to devote to teaching. As noted above, these education reforms were part of the government's desire to appease public concern about the quality of teaching and to provide more accountability and performance assessment.

As a consequence excessive demands have been placed on principals. Their functions and lines of accountability have been redefined which has meant higher workloads with correspondingly little or no support and guidance given. Newspaper reports during the initial stages of the present study abounded with reports of stress in the education system. Some examples include: July, 1994 'Teaching Profession Under Stress' (Evening Post), October, 1995, 'Stress of Tomorrow's Schools too much for Principal, (Otago Daily Times), April, 1995 'Teacher Stress, It Really Means Misery', (New Zealand

Herald), July, 1996 'Maori School Teachers in Crisis' (Te Maori News). The headline of the Ashburton Guardian, (April, 1996), 'Serving Tours of Duty in Educations Battle Zone', particularly highlighted the pressure felt by many principals and teachers at this time. This increasing tension felt by schools management coupled with society's emphasis on cost containment has impacted negatively on many schools (Bridges, 1992). There have also been increasing requirements from government and society for educators to move away from 'soft', difficult to measure educational outcomes to 'hard' measurable school outputs. These 'hard' outputs have required teachers to raise students' achievement levels, provide multiple child assessments, elevate school effectivencss in short spaces of time, while keeping up to date with technological advances and incorporating new curricula each year. It is highly likely with these new corporate demands, that New Zealand primary school teachers are feeling under considerable pressure which, if not corrected, may lead to the severe form of occupational strain, burnout. Thus in light of these reforms and the increasing demands for accountability, one of the aims of the present study (Phase 1) was to gain up to date information on New Zealand teachers' perceptions of job related stress, and to document their awareness of job related stress and coping strategies.

As with any major organisational change, there are likely to be schools that adapt, and are efficient and well managed with satisfied staff. There are also those schools that do not adapt well to change and whose individual members within the organisation feel under increased pressure. Schools as social/cultural organisations have their own unique environments with their aims, goals, and ideologies that can act as organisational stressors before one even considers the impact of extra organisational stressors (outside) forces which come from family, parents, and society. Thus, education reform with its demand for accountability may tip the balance in many schools which do not have the leadership or coping mechanisms in place to deal with the new changes. There may be many school organisations that are having problems, and reports from the media of early retirements and high stress levels of principals and teaching staff, indicate that some individuals are likely to be experiencing a unique form of job strain which is often experienced by workers in human service professions and is known as burnout. This severe and extreme form of stress which has had widespread attention in recent years in both academic and popular literature, has very severe consequences for individuals and their organisations and costs the government millions of dollars each year.

1. 3 Rationale for the Study

There are a number of reasons for focusing on the area of burnout. Firstly, the subject of stress management has been gaining enormous importance in recent years partly due

to the increasing pressures and complexities of the society we live in. Organisational skills for managing stress, and therefore lessening the chances of burnout are required not only for teaching staff, but for all individuals in our society.

A second reason for focusing in this area, was the author's commitment to social and educational betterment and the desire for teachers to understand and be aware of stress in their own lives. This personal ideology is based within the axiological view which concerns our ideas and beliefs and how they are valued by the individual. Of importance are the obligations, both ethically and politically, towards the research participants and towards society in general. For example, how should the researcher use the knowledge of burnout? Personal values, lived experiences and intentions of researchers have recently been questioned (Clark, 1997), as they have an impact on the type of methodology that is used and how the findings are interpreted. The aim of this study was to make readers aware of the complexities of burnout and in so doing make them able to create better conditions for teachers and workers in school organisations. The view taken in this thesis is that the personal values, 'lived experience' and 'voice' of the participants need to be taken into consideration in order to understand the factors that have an affect on burnout.

New Zealand's progress as a nation and ability to be prosperous in today's competitive world economy requires that our education system adapt to promote life skills, enabling students to attain high standards and develop appropriate personal qualities which will equip them for the changing world they live in. From this wider perspective, it was hoped that the present study could offer information on how to create better conditions for productive, low stress school environments and to outline what aspects of the school work environment contribute to high stress and burnout among teachers.

Furthering this wider perspective is the Ottawa Charter (1986), which states that, in order for people to reach a state of complete physical, mental and social well-being, individuals must be able to change and cope with their environment. It also states that this must be facilitated in school, home, work and community settings. Thus our schools, as professional organisations, need to develop healthy school communities by focusing on relevant social issues such as stress management and burnout. We need to become aware that an effective school is not just one that has high pupil achievement but one that promotes and provides a supportive environment ensuring healthy balanced teaching staff and one that actively works on ways at reducing stress and burnout in the workplace.

Another important guideline stipulated in New Zealand is the health promotion guidelines for mental health in schools. Stress management and positive coping strategies are inextricably linked to mental health. Mental wellness requires individuals to be able to manage stress and cope with difficulties that are presented to them, or to be able to seek help. Although the mental health guidelines suggest that each school will have its own goals for mental health, they do suggest, (amongst other things) that schools promote awareness among staff and students about mental well being, including how to identify when mental health is threatened. This awareness can be directly applied to stress management and indeed one of the goals of this research was to provide research evidence showing that certain environmental conditions were conducive to lower levels of stress among staff.

Despite the growing concern about burnout in society and in human service organisations (Maslach, 1999) there have been limited studies carried out on burnout of teachers within New Zealand schools. Most research has been carried out in the United States, United Kingdom, Australia, Malta, Finland and Israel. The New Zealand research prior to 1989 is now outdated, and has been criticised by Nash (1989) who stated that many of teachers and other staff who participated in the studies were critical of the education reforms thus their assessments were likely to be negative. Post 1989, Manthei & Gilmore's 1994 study cited evidence for increased levels of stress in New Zealand schools, and Howe, Tuck, Mathei, Adair and Moore's (2000) study found moderate levels of stress and job satisfaction in N.Z. Primary Schools. While these studies showed a trend towards increased levels of stress, few studies have directed their attention to the more serious effects of burnout and looked in depth at the environments of both low and high burnout schools.

Another rationale for exploring the school's work environment, was that personality variables (for example low self esteem) are at best extremely difficult to modify and have already been proven to contribute to stress. Focusing on environmental factors which can more easily be modified to reduce stress, was likely to provide valuable directions towards establishing or developing healthy school environments where interventions could be recommended. It was therefore important and timely to find out how the education changes with their demands for accountability are impacting on the lives of teachers and whether they perceived this to have altered their workloads and contributed to raised (or lowered) stress levels in any way. Thus this research will hopefully contribute to the understanding of stress and burnout in our New Zealand schools, aid future teacher in service programmes and provide directions that could be used on projects or schools aimed at improving the effectiveness of schools.

1. 4 Purpose of the Study

Research on stress and burnout in New Zealand has shown that teacher stress among New Zealand teachers has increased since the 1970s and early 1980s (Manthei and Gilmore, 1994). Research from 1989 to the present, with the implementation of education reforms, also provides evidence of increased stress in teaching that can directly be attributable to the effects of Tomorrow's Schools reforms (Jeffries, 1991; Bridges, 1992; McGee, Keown & Oliver, 1993). This thesis, which explored the current state of stress and burnout in New Zealand Primary Schools in light of the education reforms, was carried out in three phases. The first two phases (Phase One and Phase Two) are considered preliminary phases before examining the in-depth nature of burnout in four school environments in Phase Three. The three phases, which are briefly overviewed below, are outlined in more depth in chapter three.

Phase One

The aim of the first phase (detailed in chapter four) was to identify the current levels of stress in urban New Zealand school teachers since the education reforms. Another aim was to identify work stressors that were causing teachers the most stress and to see what coping strategies teachers were using and those which they found most useful. This phase also examined teachers' perceptions of stress in relation to the new education reforms, in order to gauge the environmental situations that were contributing to positive or negative outcomes.

Phase Two

The aim of the second phase (detailed in chapter five) was to measure burnout (an extreme form of stress) among staff of 56 primary schools using the Maslach Burnout Inventory specifically developed to gauge levels of burnout among human service professionals. While this measure indicated levels of emotional exhaustion experienced by our New Zealand teachers, it also provided a comparison with United States teachers, to determine the relative levels of burnout of New Zealand teachers compared with American teachers.

Phase Three

The aim of this last phase (detailed in chapters six) was to investigate burnout within the work environment of four primary schools. The findings from this phase gave evidence for preferred school work environments and environments that were conducive to lowering or maintaining appropriate levels of stress. Ultimately, knowledge generated from this research could be used to guide the administration and

structuring of school environments so that they maintain a facilitative, nuturing climate that operates effectively despite outside reform and change in society.

1. 5 Statement of Purpose

The overall purpose of this research is to understand, by a process of reflection and critical analysis, more about the conditions that affect burnout in primary school teachers. Over the past decade, there has been much debate and research carried out about causes and effects of burnout in general. This research seeks to document from the point of view of those involved, the experiences, values and beliefs about burnout in primary school environments. Accordingly, the study makes use of multidimensional research perspectives, documents the views of participants in two major cities and involves an indepth analysis of four school environments in Auckland, New Zealand. A range of qualitative and quantitative data analyses and information gathering techniques were used.

This study resulted from the accumulation of experience in the field of stress and burnout education. The researcher's own studies, along with those of others in the area, have consistently demonstrated that research in this area is complex, ongoing and increasingly relevant. In addition to this research there have been many associated activities undertaken. This is illustrated by the following:

- the publication of a report to New Zealand Education Institute
- presentation of a paper to a major health psychology conference in Tokyo
- the award of a MURF grant from Massey University
- the publication of an article in *New Zealand Journal of Educational Studies*
- the publication of an article in the *New Zealand Journal of Psychology*
- seminars on stress management to staff at four schools

It is hoped that this research, together with the associated activities, will assist researchers, practitioners and policy-makers to conceptualise, redefine issues and increase their understanding of the conditions needed to decrease levels of burnout in school institutions. There needs to be an understanding, through critical analysis and reflective awareness, of what steps need to be taken to achieve lowered levels of stress

in the school environment and that it is a school's responsibility to adhere to practices that are found to contribute to facilitative, nurturing school climates.

To put the research into its context, the next chapter will detail the nature of stress and burnout. Chapter three will provide an overview of the research process.

1. 6 Organisation of the Thesis

This thesis is organised into three phases. Each phase contains a complete research study with its own method, results and discussion. Phase one represents the preliminary phase which established the ground work in the area of teacher stress. The second phase, Phase Two, provids a detailed quantitative study using the MBI, establishing levels of emotional exhaustion which is discussed in chapter five. The last phase of the study, Phase Three, is contained within chapter six which presents the methodology, results and discussion for the qualitative data.

A brief description of the contents of each chapter is presented below.

Chapter 1: presents an overview of the research and explains how background societal influences and changes in educational reform have affected schools in New Zealand. A rationale and purpose for the research is given, along with the statement of purpose.

Chapter 2: presents a comprehensive literature review providing the history of the stress concept and the main approaches to defining stress. The review then presents the burnout concept and how it developed, along with associated theoretical models. The measurement and correlates of burnout are discussed, and the final section covers local and international studies on teacher stress and burnout.

Chapter 3: describes in depth the conceptualisation of the research process. In this section, existing literature and research are used to explain each of the main theoretical frameworks that have shaped the conduct of research in the field. The rationale for selection of the research perspective used in the present study is outlined along with design and aims of the study.

Chapter 4: provides a detailed description of the preliminary study (phase one) carried out in Hamilton, New Zealand. It includes the aims, method, and procedures used in the data collection, results for the quantitative and qualitative aspects of the data and a discussion of the findings.

Chapter 5: provides a detailed description of the second phase of the study (phase two) carried out in Auckland, New Zealand. It includes the aims, method, and procedures used in the data collection; quantitative results and a discussion of the findings.

Chapter 6: provides a detailed description of the third phase (phase three) of the qualitative study carried out in Auckland, New Zealand. It presents a detailed description of the methodology and procedures used in the data collection for the qualitative data and a discussion of the findings.

Chapter 7: discusses the main findings in relation to the research question based on the qualitative findings. It considers the extent to which the thesis was successful in achieving its aims, discusses limitations and specific research objectives. This chapter also discusses the implications for theory, research and teaching practice and provides a list of strategies to assist school organisations.

CHAPTER TWO

2. 0 Introduction

This chapter begins with a brief discussion of the nature of stress, the history and present status of stress, and differing perspectives and conceptual approaches. Secondly, the concept and definition of 'burnout' will be reviewed and theories, measurement and correlates of burnout presented. Thirdly, there will be a more focused review specifically related to this study, presenting studies of teacher stress and burnout.

2. 1 The Nature of Stress

In order to study stress in teachers, a clear understanding of what is meant by the term 'stress' is needed. Stress has taken on many different meanings which are often contradictory and confusing. The word 'stress' has become a word commonly used in a variety of settings, with different meanings attached to the situation in which it is used. Selye (1956), one of the pioneers in the field, points out that stress as a concept suffers 'from the mixed blessings of being too well known and too little understood' (p 53). This elusive nature of stress is demonstrated by the fact that there are many definitions of stress, and it is used in the literature in fundamentally different ways: as an environmental condition, as an appraisal of an environmental condition, as a response to that condition, and as some form of relationship between the environmental demands and the person's ability to meet those demands. Cooper (1998) also stated that there have been numerous attempts to abandon the use of the term stress on the grounds that 'it is an abstraction which does not correspond to clinical reality' (p, vi) and it is also very difficult to observe stress. However, as shown by the numerous papers presented at the 'Life of Stress' Congress held in July 1997 to commemorate the 90th anniversary of Hans Selye's birth (Csermely, 1997), the concept of 'stress' in research is alive and flourishing.

There are, however, three general perspectives which have been identified. One is that stress is a result of something outside of the individual, i.e. external factors are the cause of stress; the second is that stress is internal, it is what goes on inside the individual as they interpret or react to what is going on around them (Gold and Roth, 1993); and the third major perspective is the transactional view of Lazarus and colleagues which focuses on the cognitive processes and emotional reactions of individuals to stress in their environments (Lazarus, 1978).

As well as the conceptual confusion over the meaning of stress, there has been further confusion due to the multiplicity of methods employed to investigate its existence and nature. Measuring work stress has also proved difficult because of the constraint on empirical development imposed by what many have described as a 'ritualised' reliance on quantitative methodology (Van Maanen, 1979; Payne, Jick & Burke, 1982; Kasl, 1987). Pearlin (1981) claims that the methodology employed will dictate the particular manifestation of stress that may be observed in the functioning of the individual where the stress response is most clearly reflected (e.g. physiological, behavioural or psychological). Additional criticisms of stress research result from its heavy reliance upon correlational data, which limits inferences about causality and does not consider the role of intervening variables (Travers and Cooper, 1996).

Stress research covers a wide range of traditional research disciplines and an understanding of the major perspectives is essential for the development of some conceptual precision which can be utilised for this study. The following discussion will discuss the development of stress historically and will explore various perspectives with their corresponding strengths and weaknesses.

2. 2 History of the Stress Concept

According to Newton (1995), stress discourse and its development has been largely represented since World War II. Although the word 'stress' has been in use for some time, the development of academic theories of stress remains largely confined to the post-war period. However the term *stress* was first applied in engineering in the early 1800s. In this context stress was construed as the load of force acting upon an object, divided by the area over which it acted, and *strain* to the effects of the force on the object, including weakening and changes in shape.

The earliest figure associated with the establishment of stress as a legitimate subject for academic study was American physiologist Walter Cannon who used the term 'stress' to refer to patterns of physiological response of 'organisms' to emotional stimuli (Beehr and Franz, 1987). While Cannon in his 1914 paper refers to problems of 'great emotional stress', his primary concern was with developing a physiological theory of emotions and of instincts. Cannon did make reference to stress, but it was not central to his theorising. Cannon's primary concern was with the physiology of homeostasis, not with physiological stress per se. Cannon introduced the term *homeostasis* to designate the maintenance of the internal milieu (Cannon, 1922). This research focused on the specific reactions that are critical in maintaining internal balance during emergencies such as nervous irritation. In his

later work he adopted the term stress and spoke of *critical stress levels* which he defined as those which could bring about a collapse of homeostatic mechanisms in relation to social and industrial organisation (Cannon, 1935; 1939). Cannon's work is still regarded as influential because of the way in which it is currently used in order to portray stress as a struggle between our 'primitive' biological nature and the complexity of a modern and rapidly changing society (Newton, 1995). Cannon's classic studies established the existence of many highly specific mechanisms for protection against hunger, thirst, hemorrhage, or agents tending to disturb normal body temperature, blood pH, or plasma levels of sugar, protein, fat, and calcium. He particularly emphasised the stimulation of the sympathetic nervous system, with the resulting hormonal discharge from the adrenal glands, which occurs during emergencies such as pain or rage. In turn this autonomic process induces the cardiovascular changes that prepare the body for 'flight or fight' (Selye, 1991).

It was against this cumulative background that Hans Selye, an endocrinologist began his notable studies of stress and established the most widely used definition of stress. This provided much of the impetus for current psychological investigation and led others to regard him as the 'father of stress' (Rice, 1987). Selye began to notice that many diverse medical conditions exhibited similar signs and symptoms and thus he began to study the commonalities of illness. That is, he accepted that while each disorder or disease is unique, all diseases have similar symptoms in common - i.e. a variety of dissimilar situations - emotional arousal, effort, fatigue, pain, fear, concentration, humiliation, loss of blood and even great and unexpected success - are capable of producing stress within their bodies which respond in a stereotyped pattern of biochemical change. Thus Selye defined stress as 'the non-specific (that is, common) result of any demand upon the body, be the effect mental or somatic' (Selye, 1956, p.58). This definition gives the name stress to the unified response rather than to the multifarious stimuli that might have produced it. Selye also suggested that these stimuli, or evocative agents be referred to as 'stressors', which set the stage for much of the current terminology.

In the last few decades, research on stress has broadened and become influenced largely by behavioural scientists, moving away from the strict focus on physical stimuli and their physiological consequences (Travers and Cooper, 1996). There has also been a shift of orientation from physical stressors, such as mechanical trauma, towards psychological stressors such as role ambiguity and the impact of psychological and social influences upon the individual. However it has been observed that responses to a stimulus will not have the same stressful implications

for all individuals. Certain characteristics of the individual (e.g. age, sex, education, personality characteristics, coping style, social situations and past experiences) can all lead to variations as to what constitutes a stressful experience (Travers & Cooper, 1996). This recognition of the complexity of the interacting or intervening factors which determine behavioural and physiological responses to stress, led subsequent stress researchers to adopt a broad, many-sided perspective, and to avoid simplistic, one-sided definitions (Ursin & Olff, 1993).

2. 3 Main Approaches to the Definitions of Stress

As discussed at the beginning of this chapter, theory and research on stress lack agreement regarding basic terminology, particularly the definition of stress itself. However, although stress as a concept is now becoming more accepted as relational in nature, involving some sort of transaction between the individual and the environment, it continues to be defined in several fundamentally different ways, each of which has implications for the way it is measured and the way in which results are explained.

While there are still unresolved issues as to whether stress can be explained as either a stimulus, a response, or some complex transactional term or process, the following discussion will explain the development of each process leading to a definition and measurement of stress. It will then suggest the generally accepted view that stress involves a transaction between individuals and their environment, in which they appraise or perceive the situation as exceeding their resources and endangering their well-being.

In studying stress, researchers have focused on three or four main approaches as ways to conceptualise stress. The first category, is the ***stimulus-based*** approach derived from the engineering approach. In this approach researchers have concentrated on stress as a phenomenon which is extraneous to the individual, with no account taken of individual perceptions or experience. Here stress is the independent variable for study, which places a strain reaction on the individual (Cox & Ferguson, 1991). This approach views stress as a disruptive environmental agent.

The second category is the ***response-based*** or medico-physiological/ psychological approach where researchers focus on stress as a response to stimuli that may be a disturbing situation or environment, e.g. shift work, noxious environments. Here stress is the dependent variable and responses may be physiological,

psychological or behavioural. The level of analysis of this approach has often been concerned with disturbances of biological systems (e.g. Cannon, 1929).

The third and or fourth category are the ***interactionist or transactional*** approach which reflects a psychological orientation. The interactionist approach emphasises the importance of the way individuals perceive and react to situations which are forced upon them; it reflects therefore a 'lack of fit' between the individual and the environment, its antecedents and effects - stimulus-response approach (Fisher, 1986). The transactional approach is similar but more developed than the interactionist approach, where the emphasis is on the processes of appraisal and coping that operate between the person and the environment (Cox, 1978; Lazarus & Launier, 1978).

These four approaches do cover common ground, but mainly differ in the definition they propose and the methodologies used to investigate stress. To understand how these approaches have developed, the following sections will discuss in further detail each approach and the limitations and advantages of each.

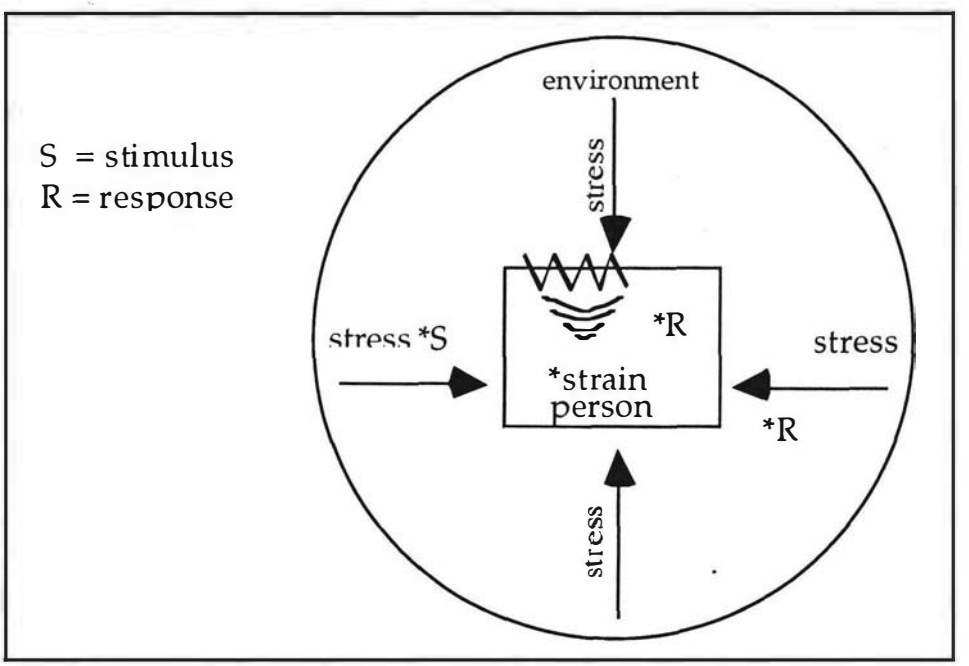
2. 4 The Stimulus Based Definition

This approach to stress views stress as a stimulus, i. e an event or an object that impinges on the individual. It links health and disease to certain conditions in the individual's external environment. Hippocrates believed that the external environment conditioned characteristics of health and disease (Goodell et al. 1986) and this early approach to stress perceives stress as an independent variable. The stimulus approach rests upon the physical sciences, particularly engineering and Cox (1978) suggests that just as physical objects have a limit of stress they can carry, so do human beings. Accordingly, if the stress placed on an object falls within the limits of elasticity of the material of which it is made, the material will remain unaffected when the stress is removed. Travers & Cooper, (1996) discuss this scheme by explaining that various disturbing features in the environment impinge upon the individual in a disruptive way, and that this brings about changes in the individual. The observable strain level and type will depend upon the individual and the duration and severity of the pressure exerted. In 'human' terms the pressure may be physical or emotional, and if taking place over a period of time, may eventually lead to various anxiety reactions, which in turn may become stressful (see Figure 2.0).

Methods used in this approach usually focus on the identification of potentially stressful stimuli: environmental stressors such as noise, social stressors such as

racism, physical stressors such as having a disability, economic stressors such as poverty and natural disasters for example floods or earthquakes. This approach has also been given a lot of attention in the research on occupational stress, with studies attempting to isolate features in the work environment that are detrimental to the individual's psychological and physiological well-being. The popularity of this approach has been said to be because of its 'scientific approach'. It allows researchers in psychology to measure stress in a more mechanistic way; that is, in much the same way as observing stress imposed on a bridge and its effects. Inherent in this theory is that any individual has a tolerance level that may be exceeded and that this 'over -stepping' may result in temporary or permanent damage (Travers and Cooper, 1996). It also emphasises the fact that any individual is exposed to a multitude of stressors *all* the time and may cope with these quite effectively, though it may take a minor event to 'tip the balance' between coping behaviour and potential total breakdown.

Figure 2.0 A Stimulus-Based Model of Stress (Sutherland & Cooper, 1991)



The stimulus approach has been adopted by sociologists who view stress in terms of the social context in which it occurs. Other researchers have used alternative sociological concepts such as social status, alienation and or cultural change among others as causes of stress (Graham & Reeder, 1972).

The sociological approach is not without criticism. Totman (1979), for example, claims that many sociological theories are more descriptive than explanatory, and in particular fail to consider the way in which social experiences come to have an impact on the individual. Lazarus (1966) also claims that sociological theories take no account of how the individual perceives the situation, and processes which might mediate between the initial social strain and the subsequent stress reaction are ignored.

The stimulus model did, however, include a psychological perspective aligned with behavioural psychology. This focus included the stimulus-situational characteristics that are new, intense, rapidly changing, sudden or unexpected, such as gaining a new job or winning an unexpected prize. The alternative psychological focus included a stimulus deficit, such as the absence of expected stimulation, and included environments that produce fatigue and boredom such as working on a factory line or being unemployed.

Despite the popularity of the stimulus approach, the stimulus model is not without its limitations. One is that stimulus events alone may be insufficient when predicting an individual's response. For example two teachers subjected to loud, noisy classrooms may show quite different levels of strain, or may show strain at different times. Thus it fails to take account of individual differences, and it ignores the perceptual cognitive processes which underpin such differences (Cox & Fergusson, 1991).

Another criticism of this approach is that the response to a stressor must first be recognised before the search can begin for the stimulus which preceded it, and the stimulus definition makes no mention of any intervening process (i.e. cognitive appraisal or coping efforts) that might exist (Ivancevich & Matteson, 1980).

2. 5 The Response Based Definition

This view of stress as expressed in the response-based model is one of a dependent variable. It is described in terms of the person's response to some disturbing or threatening stimuli. If a response definition is used to operationalise stress, the psychological and physiological response outcomes such as anxiety, anger , headaches, blood pressure may be used as measures of stress. As Fisher (1986) suggests, a person can be deduced to have been exposed to stressful conditions if signs of strain are present. Most people understand the feeling of being 'under pressure', other terms that may be used synonymously with stress are tension, strain and pressure. Thus, with this model of stress the main interest is with the

manifestation of stress which may occur at psychological, behavioural or physiological levels (see Figure 2.1). Although it may appear that the three types of response are discrete elements, this is not so, as the three are interrelated, although the exact relationship between them is not clear (Schuler, 1980).

The physiological approach to the definition and study of stress was established by the work of Selye (1956). His definition of stress as 'the non specific response of the body to any demand made upon it', (Selye, 1956, p58), gave much momentum to the development of stress research. Selye recognised that stressors acting as stimuli were specific but they all had in common a requirement of the body to adapt physiologically by raising the level of neuroendocrinal activity. This meant that no matter what the stressor, the reactions within tissues and organs were essentially the same. Selye called this the General Adaptation Syndrome (G.A.S.).

The G.A.S consists of three distinct phases, the *alarm reaction,* triggered by exposure to stressors, followed by a *stage of resistance* which involves the body's full response to the stressor in its attempt to adapt, and finally a *stage of exhaustion* occurring when adaptive reserves are depleted. At this point resistance to the stressor influence declines, physiological breakdown occurs and the body becomes highly susceptible to infection.

Selye, an endocrinologist who experimented mostly with animals, maintained his generalist position for over 40 years. He believed that any noxious agent could mobilise the GAS response, even purely psychological stimuli. The reaction, however triggered, ended with the same physiological response. This aspect of the work has been under increasing criticism and has been shown to have certain shortcomings.

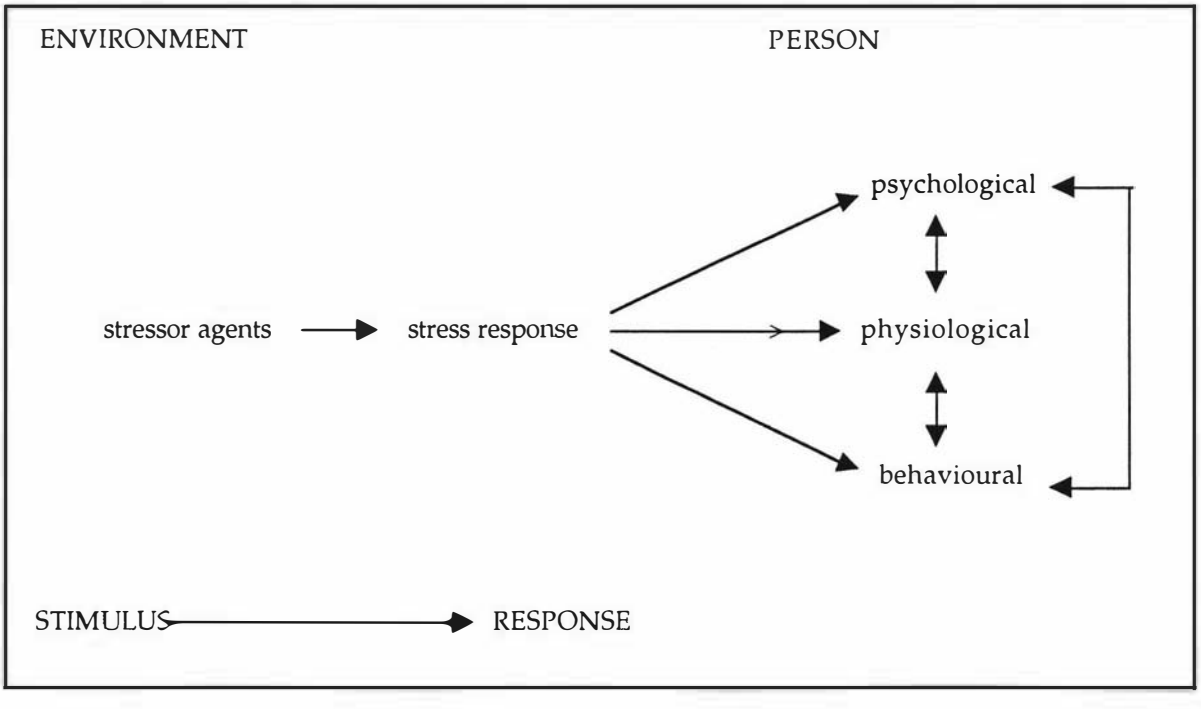
Mason (1971), for instance, was able to demonstrate that levels of secretion of a corticosteroid hormone varied with the type of stressor stimulus. Fasting and exercise stressors on humans differed from those of temperature extremes in their effect on hormone secretion levels. Since then other research evidence supports the view that different stressors can be linked with specific physiological processes (Frankenhaeuser, 1971).

Selye's scheme has also been criticised for its over emphasis on body defence mechanisms after the event and not the psychological and physiological signalling process that recognise the noxious potential of stressors (Lazarus, 1981). The utility of Selye's model is limited in relating social behaviour to physiological processes

on one hand, and disease on the other. However the work of Selye is central to stress research in that it established the importance of the neuroendocrine system with the documented 'fight or flight' stress response, the mechanism which mobilises the body in threatening situations with responses involving both nervous and hormonal (neuroendocrine) systems.

As early as 1953, Grinker and his associates, with their experience of combat stress veterans, criticised existing response-based models in medicine for their detachment from environmental factors. They attempted to construct an alternative model based on the assumption 'that the human organism is part of and in equilibrium with its environment, that its psychological processes assist in maintaining an internal equilibrium and that the psychological functioning of the organism is sensitive to both internal and external conditions' (Grinker, 1953, p. 152). Because there was seen to be no clear correlation between the various responses across individuals or situations, this initiated new studies of stimuli which were associated with the stress reaction occurrence. Thus research was to shift focus to explore those situations or aspects of a situation (i.e. a stimulus) that might cause stress.

Figure 2.1 A Response-Based Model of Stress (Sutherland & Cooper, 1991)



2. 6 Summary of Response and Stimulus Approaches

From the discussion above it can be observed that the physiological and engineering approaches to stress largely ignore individual differences in the psychological nature and the perceptual and cognitive processes which affect the individual during the stress process (Cox, 1990; Sutherland & Cooper, 1990, cited in Cox, 1993). Both these approaches have limitations, empirically and conceptually, as they do not adequately take into account existing data. Looking at the physiological model, a noxious stimuli may not produce the stress response in its entirety, i.e. there may be an alarm reaction but not the resistance or exhaustion reactions, also the stimuli that cause a stress response in one individual may not produce it in another. Similarly when looking at the engineering model, a situation may or may not be stressful, depending on the circumstances, the characteristics of the individual, the personal meaning of a situation or due to a host of other reasons, social support at the time or coping skills acquired.

Scott and Howard (1970) explain this succinctly, claiming that certain stimuli, by virtue of their unique meaning to particular individuals, may be problems only to them; other stimuli, by virtue of their commonly shared meaning, are likely to be problematical to a larger number of persons. Thus they imply that mediation of strong cognitive as well as situational (context) factors affect the overall stress process.

Finally, Mechanic (1976) argued that it is difficult to predict the effect or the process if only one dimension of the problem is known. Definitions of stress as either a stimulus or a response largely ignore the interactions between individuals and their various environments and, with particular regard to the present study, they would ignore the psychological and organisational contexts of work stress. Therefore the third approach to defining stress, as an interaction, will now be addressed, in an attempt to overcome the limitations of the stimulus - response models.

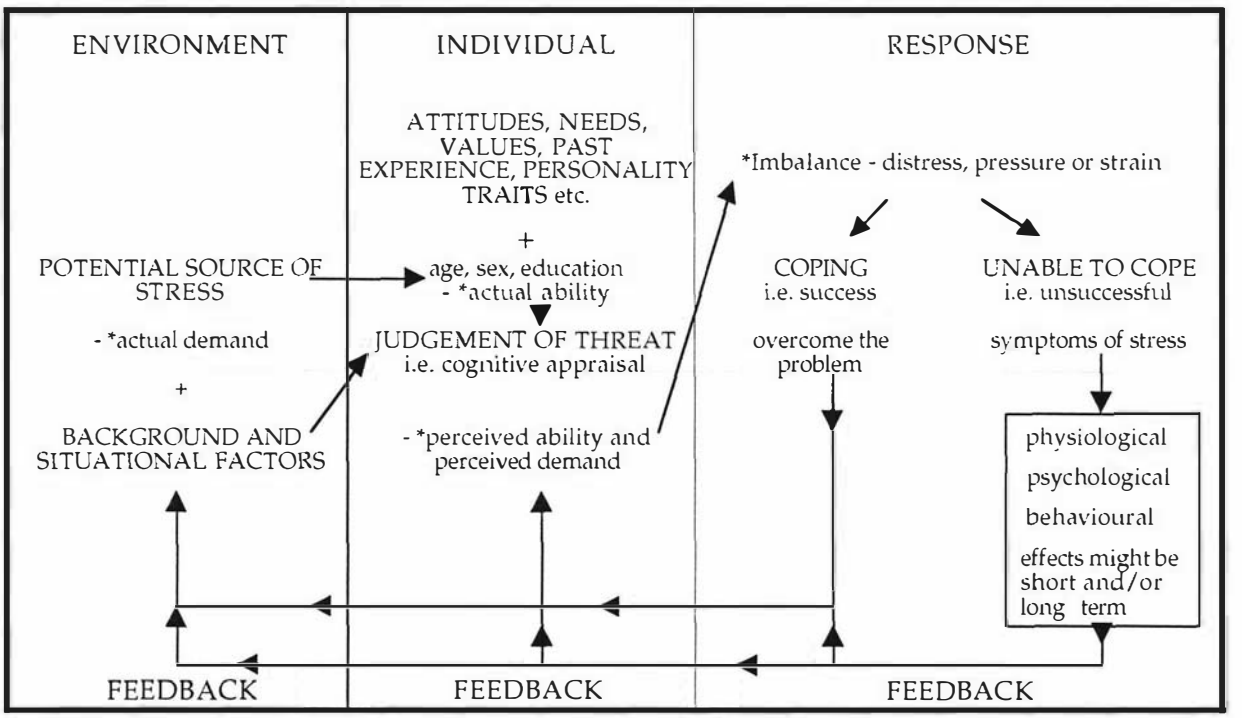
2. 7 The Transactional or Interactional Definition of Stress

These approaches to stress conceptualise stress as a dynamic interaction between people and their environments. These models has been termed 'psychological' because they take into account the cognitive processes and emotional reactions which underpin those interactions. Contemporary stress researchers see stress as an interaction or transaction between the person and the environment, i.e. it emphasises the importance of the way individuals perceive and react to situations

which are forced upon them, and reflects therefore a lack of fit between the individual and the environment, its antecedents and effects, a stimulus - response approach (Fisher, 1986).

Recent research on stress no longer sees it as a static phenomenon, as a response or a stimulus but, as described above, a complex process incorporating both of the previously mentioned models. There has therefore been a shift from viewing psychological stress as either a environmental demand or as a response, to viewing it rather in relational terms (e.g. McGrath 1974; Cox, 1978; Cooper et al 1988). This shift in thinking has led to a number of 'person-environmental fit' models where theorists assume that people influence and respond to their environments. Stress is essentially the degree of fit between the person and the environment, i.e. it is not the environment per se that is stressful, but it is the relationship between the person and the environment which may result in the experience of stress. Stressful experiences are therefore seen as a product of the two interacting systems. Stress occurs from an imbalance between the perceived demand and the perceived capability of meeting it, in other words when the magnitude of the stress stimuli exceeds the individual's capacity to resist. In order to deal with stress, a person may attempt either to alter his or her environment or learn ways of changing how they react to the stressful situation. Often coping will occur in order to reach a state of fit between the person and the environment. Figure 2.2 provides a version of an interactive model of stress by Sutherland and Cooper (1991). This model shows stressful interactions seen as a product of two interacting systems. Stress occurs at the point at which the magnitude of the stress stimuli exceeds the individual's capacity to resist. In order to deal with the experience of stress, a person may attempt either to alter his or her environment or to learn new ways of trying to change how he or she reacts to a particular situation. Therefore, coping occurs in order to try and reach a state of fit between the person and the environment.

Figure 2.2 An Interactive Model of Stress (Sutherland and Cooper, 1991)



A major limitation (and a critical difference between the interactionist and transactional models) of the 'person-environment fit' interactive models (e.g. Cooper, 1981) is that they assume that some sort of static situation exists (Travers and Cooper, 1996), whereas in reality both stressful situations and individual's responses to those situations are dynamic and ever changing. Transactional models have now resulted in increasing recognition of the importance of perception and cognition as a crucial factor in determining stress. As early as 1966, Lazarus stated that for an event to be seen as a stress stimulus, it must be phenomenologically interpreted by an individual. Earlier researchers also tended to focus on the relationship between stressful life events and various physical and psychological outcomes, which retained a 'mechanistic nature' (based on the stimulus-response approach) where the person was essentially regarded as passive in the process. Consequently individual differences between individuals were not dealt with adequately.

While these earlier interactional perspectives focused on the structural features of the person's interaction with their environment, the transactional approaches based on this understanding became more concerned with the psychological mechanisms of cognitive appraisal and coping that underpin interactions

(Trenberth, 1996). Thus the transactional perspective in its development has became defined as 'a cognitively mediated relational concept' (Meichenbaum, 1985, cited in Travers and Cooper, p17). Here the assumption is made that mental states or structures determine the presence or absence of stress (Fisher, 1986), i.e. it is the individual's perception and interpretation of the stimulus which is important.

The concepts of cognitive appraisal and coping processes are the essence of the transactional model. Lazarus (1966) established that threat and appraisal are two concepts central to stress theory. Stimuli, he claimed, must have previously been identified with harm if an appraisal of threat is to occur. Threat has two major dimensions: it is anticipatory in that future harm is expected and it relies on cognition. Thus an appraisal is made (by cognition) that will influence whether a person will experience a situation as stressful or not. These models view a person as an active agent in his or her environment; someone who actively appraises the importance of what is occurring to his or her well-being. It can be seen that stress is a dynamic cognitive state and it is a disruption in homeostasis or imbalance which gives rise to a requirement for resolution of that imbalance or restoration of homeostasis (Dewe, Cox and Fergusson, 1993). While there are other transactional models of stress such as House (1974), Gaudry, (1973), and Fineman's (1979) which claim that coping occurs before stress is experienced, the most coherent and comprehensive of these is Lazarus' smodel (1966) and it is this approach which is most often built upon in research.

In summary, each of the four perspectives discussed has strengths in assisting with the clarification of stress concepts and helping develop stress research. The physiological approach suggests physiological responses of the body essentially constitute stress because it will upset homeostasis. The emphasis is on the automatic, involuntary nature of the neuroendocrine response which, if prolonged is sufficient to diminish the body's disease defence mechanism. Sociologists and organisational theorists propose careful assessment of the social 'scene' of work and cultural processes to isolate stressors. In these approaches, the importance of the distinctive, dysfunctional states described as 'strain', 'burnout' or 'unwellness' are precursors of disease and have implications for many organisations, including schools. The present study is founded on the transactional approach which is not simply the environmental stimulus or a response to demands as previous definitions have tended to emphasise, but rather it is a dynamic concept which emphases adjustment and coping and suggests that appraisal and cognition of threat from a stressor or stressors are the vital pre-conditions necessary for and part of the stress reaction.

Having presented the historical, theoretical and developmental perspectives of stress, the next section will discuss the concept and definition of 'burnout', which is an extreme form of stress usually developed over a period of time and prevalent in human service organisations. As well as presenting theoretical models of burnout the issues of measurement, correlates of burnout and a review of teacher burnout studies will be presented.

2. 8 The Burnout Concept

Burnout, was first described by Freudenberger (1974) as a state of physical and emotional depletion resulting from conditions of work, however Maslach and her colleagues (Maslach and Jackson, 1982, 1984, 1986) popularised the concept, pioneered its study and legitimised its credibility. While Freudenberger, a psychoanalyst, based his model of burnout on the psychology of the individual, Maslach and Jackson social and organisational psychologists, approached the study of burnout using a perspective involving the relationship between environmental and individual factors.

For many years, burnout has been recognised as an occupational hazard for various people-oriented professions, such as the human services, education and healthcare. These therapeutic or service relationships that developed with recipients required an ongoing and intense level of personal, emotional contact (Maslach, 1998). Within such organisations the prevailing norms are to be selfless, and put other needs first, to work long hours and do what ever it takes to help a client, patient or student; to go the extra mile and to give one's all. Moreover, as Maslach (1998) states, the organisational environments for these jobs are shaped by various political, social, and economic factors (such as funding cutbacks or policy restrictions) that result in work settings that are high in demands and low in resources. This is particularly relevant to staff working in an educational setting, and since the first identification of burnout, there have been increasing numbers of research articles, and studies on the burnout phenomenon in schools.

The discussion of the burnout construct is based within the overall framework of the transactional model, since burnout is a product of the interaction between environmental factors (demands) and individual perceptions and behaviours (such as coping). As outlined earlier by Sutherland and Cooper (1991), stress does not reside solely within the environment or within the individual, but results from the dynamic transactions which occur between the two. Thus the

same framework needs to be applied when considering this unique form of strain, burnout.

The following discussion will examine the concept of burnout, alternative theoretical models of burnout, various methods of measuring burnout along with some of the major correlates of burnout.

As Maslach (1998), a foremost contributor to the study of burnout, explains the experience can impair both personal and social functioning. Obviously some people will quit their job as a result of burnout, and Dunham, (1998), suggests that turnovers for teaching in the UK are increasing, such that 46,950 teachers for example in one year will change jobs, many of these due to the strain of burnout. Others workers may stay on, but will often do the bare minimum rather than their best. This decline in the quality of work and in physical and psychological health can be costly, not just for the worker, but for everyone affected by the worker.

2. 9 Defining Burnout

Like stress, burnout has been defined in various ways and has had popular origins, as well as academic ones. Despite the difficulty in finding a standard definition, there has been a wide variety of opinions about what it is and what could be done about it. However, there has been an underlying consensus about three core dimensions (discussed below) of the burnout experience with subsequent research on these leading to the different theories on the development of burnout.

One of the most publisised definitions Maslach (1986), is that burnout is generally conceived to be a chronic response to extreme pressures and involves emotional exhaustion, feelings of low accomplishment and a depersonalisation of others in the work context - a tendency to treat them as objects rather than people. A recent definition which included a review of the burnout research by Cordes and Dougherty (1993), summarised various conceptualisations of the term, including, "a) to fail, wear out, become exhausted, b) a loss of creativity; c) a loss of commitment for work; d) an estrangement from clients, job and agency; e) a response to the chronic stress of making it to the top; and finally f) a syndrome of inappropriate attitudes towards clients and toward self, often associated with uncomfortable physical and emotional symptoms" (p.623).

Another distinct definition by Freudenberger and Richelson (1980) describe burnout in terms of chronic fatigue, depression and frustration typically engendered by commitment to undertakings that did not realise the person's ambitions and expected rewards. Although this conceptualisation incorporates some the elements of burnout, it is problematical because as O'Driscoll (2000) states, 'it confounds burnout with variables which are normally considered as distinct from, although related to, burnout, especially depression and chronic fatigue (p.4). Similarly it is important to differentiate burnout from depression and chronic fatigue. Research by Maslach and Jackson (1981a, 1986) found burnout to be distinct from, but related to, anxiety and depression. Subsequent analysis by Leiter and Durup (1994) also demonstrated the distinction between burnout and depression in a confirmatory factor analysis of the MBI and the Beck Depression Inventory. This analysis found that burnout is a problem that is specific to the work context, in contrast to depression that tends to pervade every domain of a person's life. These findings have lent empirical support to earlier claims that burnout is job specific and situation specific, as opposed to depression which is general and context free (Freudenberger, 1983; Warr, 1987). Chronic fatigue has also been debated as being different from burnout. Hobfoll and Shirom (1993) state that chronic fatigue is characterised by tiredness or lethargy, impairment of one's activities and performance, along with a general depletion of energy resources. These features as stated by Cooper, Dewe & O'Driscoll (2001) are shared with, and may be precursors of burnout, as outlined in the stress literature, however, burnout encompasses emotional (as well as physical and cognitive) exhaustion, especially that emanating from dealing with "people problems", whereas chronic fatigue may simply arise from work overload.

Further distinct definitions of burnout include those that describe it as being a more extreme result of long term stress leading to total exhaustion, apathy, alienation from work and withdrawal into a number of defensive strategies (Hargreaves, 1978). Blase (1982) also identifies burnout as a type of chronic response to the cumulative long-term negative impact of work stress. This is different from short term stress, acute stress is far more intense and refers to the negative working conditions when job stress appears to be unavoidable to the individual and sources of satisfaction or relief appear unavailable (Moss, 1981).

Burnout research attracted increasing attention in the mid 1970's and led to greater agreement in definitions. During this time Maslach and Jackson (1981) conceptualised burnout as having three core components: emotional exhaustion,

depersonalisation and lack of, or reduced, personal accomplishment. Maslach's model of burnout characterises *emotional exhaustion* as feelings of being emotionally overextended and depleted of one's emotional resources. Maslach (1998) cites major sources of this exhaustion as work overload and personal conflict at work. Workers feel drained and used up, without any source of replenishment. They lack enough energy to face another day or another person in need. The emotional exhaustion component represents the basic individual stress dimension of burnout.

Depersonalisation refers to a negative, cynical, or excessively detached response to other people, which often includes a loss of idealism. It usually develops in response to the overload of emotional exhaustion, and is self-protective at first- an emotional buffer of 'detached concern'(Maslach, 1998). The risk here is that the detachment can turn into dehumanisation. The depersonalisation component represents the interpersonal dimension of burnout.

Reduced personal accomplishment refers to a decline in feelings of competence and productivity at work. This lowered sense of self-efficacy has been linked to depression and an inability to cope with the demands of the job, and it can be exacerbated by a lack of social support and of opportunities to develop professionally (Maslach, 1998). Workers experience a growing sense of inadequacy about their ability to help clients, and this may result in a self-imposed verdict of failure. The personal accomplishment represents the self-evaluation dimension of burnout.

The above three-component conceptualisation is the most widely accepted model of burnout (O'Driscoll and Cooper, 1996), partly due to Maslach's easy to use questionnaire (the Maslach Burnout Inventory, MBI) to measure the dimensions of burnout. With increasing interest in burnout within occupations that were not so people-oriented, a third, more generic version of the MBI (the MBI-General Survey, or the MBI-GS) was developed by Maslach, Leiter and Jackson (1996). This new formulation of the MBI retained the emotional exhaustion dimension (although sources of exhaustion may not necessarily be due to people), and included new substitutes *cynicism* for depersonalisation and *professional efficacy* for personal accomplishment. Whereas depersonalisation referred specifically to relationships with other people, cynicism represents 'a distant attitude toward the job' (this may or may not include people encountered in the job). The substitute 'professional efficacy' refers to the individual's expectations of continued effectiveness at work), Maslach, (1998).

The most recent development by Maslach (1998) which has incorporated new theorising and subsequent empirical research is the development of a broader framework for conceptualising the key causal factors of burnout. This work is still taking place, and focuses on a continuum ranging from 'burnout' to its contrasting opposite state 'job engagement'. Engagement is defined in terms of the same three dimensions as burnout, but the positive end of those dimensions rather than the negative. Thus engagement consists of a state of high *energy* (rather than exhaustion), strong *involvement* (rather than cynicism), and a sense of *efficacy* (rather than a reduced sense of personal accomplishment). This state is distinct from established constructs and in organisational psychology such as job satisfaction, or job involvement. For example, while job involvement is similar to the involvement aspect of engagement with work, it does not include the energy and effectiveness dimensions. Maslach (1998) states that the engagement dimension provides a more complex and thorough perspective on an individual's relationship with work, and the concept of a burnout-to-engagement continuum enhances our understanding of how the organisational context of work can affect worker's well-being.

There has been some controversy over the these new developments, especially the inclusion of cynicism and professional efficacy as core components of burnout. Lee & Ashforth, (1993a), for example suggest that these new components may be separate, albeit related variables. Cooper, Dewe and O'Driscoll, (2001) also state that Maslach initially argued that the term burnout should be reserved for human service occupations. More recently, however, Maslach (1998) has argued that burnout can apply to other occupational groups.

Pines and Aronson (1988) present a slightly broader definition of burnout. They include physical symptoms as well and in their view burnout is not restricted to the human services. They describe burnout as a 'state of physical, emotional, and mental exhaustion caused by long term involvement in situations that are emotionally demanding' (p.9). Physical exhaustion is characterised by low energy, chronic fatigue, weakness, and a wide variety of physical and psychosomatic complaints. Emotional exhaustion involves feelings of helplessness, hopelessness, and entrapment, which in extreme cases can lead to emotional breakdown. Finally mental exhaustion refers to the development of negative attitudes towards one's self, one's work, and life itself.

As Schaufeli and Enzmann (1998) also report, it is impossible to present a general description of burnout that agrees with all the definitions that abound, as some are contradictory at least on some points. Like stress there is conceptual confusion surrounding burnout, however it can be distinguished from stress in several ways, relatively, with respect to its symptomatology and its high initial levels of motivation. As previously mentioned, it can be distinguished from depression and chronic fatigue syndrome (ibid, 1998). Not only because burnout is typically job related, but also because burnout includes social and attitudinal symptoms that are absent in these other syndromes. A relative distinction between 'burnout' and 'stress' can also be made with respect to time, burnout can be considered as prolonged job stress. In other words, demands at the workplace that tax or exceed an individual's resources (Maslach and Schaufeli, 1993).

To summarise, burnout refers to an extreme state of psychological strain and depletion of energy resources arising from prolonged exposure to stressors which exceed an individual's resources to cope, particularly stressors associated with human resource professions (Cooper, Dewe and Driscoll, 2001). Maslach and Leiter (1997) also claim that 'burnout represents an erosion in values, dignity, spirit and will - an erosion of the human soul. It is a malady that spreads gradually and continuously over time, putting people into a downward spiral from which it is hard to recover' (p.17).

Despite the abundance of definitions and theories of burnout, there is still lacking, a comprehensive theoretical framework for burnout, due to the complexity of the phenomenon (Schaufeli and Enzmann, 1998). While practitioners had identified burnout as an important social problem in the workplace, it took time before systematic study and theoretical models were developed. Maslach (1998) states that the development of a model of burnout was more of a 'grass-roots, bottom-up process' grounded in the realities of people's experiences in the workplace, rather than a 'top-down derivation' from a scholarly theory, (p.69). However, although different people used the term burnout to mean different things, there was an underlying consensus about the three core dimensions of the burnout experience and theories built upon the three-dimensional model of burnout proposed by Maslach and her colleagues.

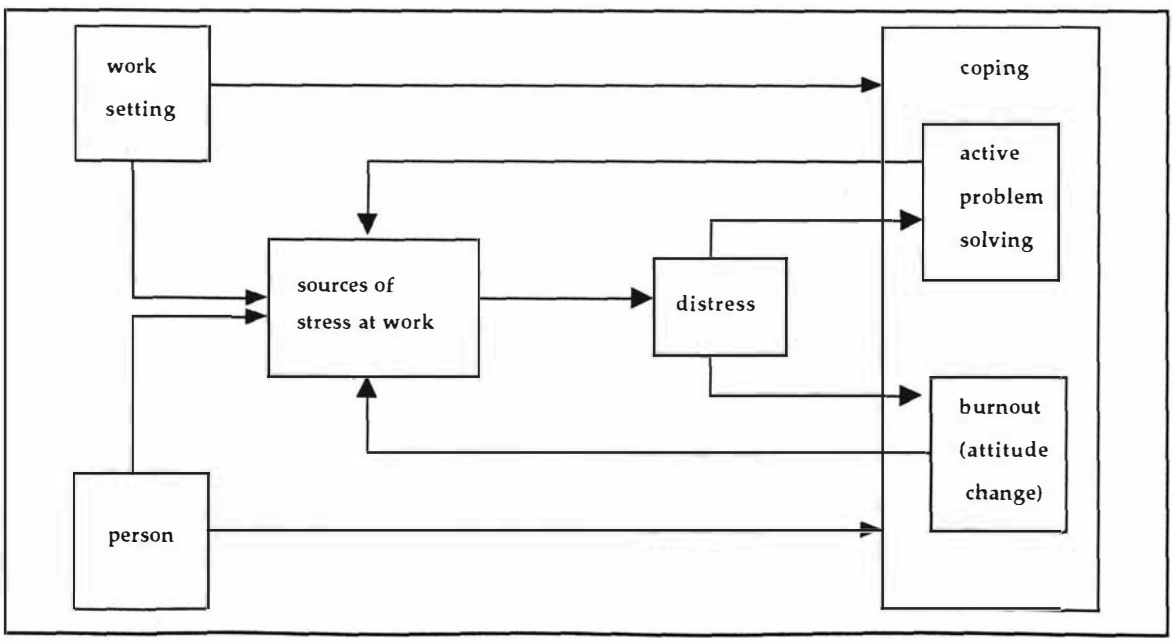
While there are a growing number of theoretical approaches, most of these are adopted from the major developmental models outlined below. They are not mutually exclusive, rather they differ in the extent to which they stress the

importance of particular types of factors in the development of burnout. Of the three major models discussed below, the first focuses on an interpersonal approach (on demanding relationships with others at work), and the second on an organisational approach (that emphasises the relevance of the organisational context). The third approach highlights the Conservation of Resources (COR) model. This model has particular relevance to burnout in work organisations, and is compatible with Lazarus and Folkman's (1984) transactional model of stress-coping which recognises the importance of perception and cognition as a crucial factor in determining stress. The COR model of burnout has been utilised as a the framework for recent empirical research in the field of burnout and offers a framework of principles which underpin other approaches, such as Maslach and Leiter's model. The COR model of burnout was utilised in this research as the conceptual framework on which to base the research. Following on from this review of models, section 2.13 presents the conceptual framework for this thesis.

2. 10 Cherniss's Model of Burnout

At the end of the 1970's Cherniss developed one the earliest theories about how burnout develops after interviewing human services professionals (lawyers, teachers, nurses and health workers) who had recently experienced great disappointment and failed to find what they originally sought. Their ideals, intentions and expectations clashed with organisational reality. Cherniss's model of burnout is illustrated below.

Figure 2.3 Cherniss Model of Burnout



Cherniss suggests that at the core of this model lie various sources of stress that result from the work setting and to a lesser extent, from the person. These sources of stress and the resulting distress can be dealt with either adequately, by active problem solving, or inadequately, by developing negative attitudes. The former reduces distress because its causes are removed or altered, whereas the latter increases distress so that ultimately burnout develops - the professional's energy is drained and negative attitudes have become a habitual pattern. This model includes both positive and negative feedback loops. Cherniss (1980a, p.158-180) also distinguished eight critical factors in human services work settings that could produce stress and burnout. These included: a poor orientation process, a high work load, too much routine, a narrow scope of client contact, lack of autonomy, incongruent institutional goals (e.g. the school's goals do not match the person's values), poor leadership and supervision practices and social isolation. In addition to these factors, two kinds of personal factors appear to be critical. The first is the balance of support and demands outside the work and second, a lack of stable, close and available network of family and friends is likely to be associated with burnout (Cherniss, 1980a). Cherniss also mentions (1980a, p. 97-133) six attitude changes that are typical for burnout, in addition to the energy depletion: reduced aspirations, increased indifference, emotional detachment, loss of idealism, alienation from work and increased self-interest.

2. 11 Golembiewski's Model of Burnout

Golembiewski and colleagues consider burnout to be a 'virulent process' that develops progressively through eight phases. Golembiewski and Munzenrider, (1988) and Golembiewski et al., (1996) consider that burnout is triggered by job stressors and leads in turn to physical symptoms, decreased performance and reduced productivity. Although this model incorporates the Maslach three-dimensional nature of burnout (Maslach, 1988), Golembiewski uses a modified version of the MBI, as he disagrees with the sequence of the three components and believes that the burnout process starts with depersonalisation, followed by a lack of personal accomplishment and emotional exhaustion.

Golembiewski contends that depersonalisation, the first manifestation of burnout, has the effect of impairing performance and, as a result, the individual's sense of personal achievement on the job is jeopardised. Reduced personal accomplishment then becomes the second phase in the development of burnout. Increasing depersonalisation and the diminished sense of accomplishment in turn then lead to the development of emotional exhaustion

as the strain associated with depersonalisation and lowered personal accomplishment surpasses the person's coping ability. Emotional exhaustion is the end phase of the process in Golembiewski's model.

Golembiewski's eight stages of progressive burnout (see figure 2.4) do not represent a developmental process but a way of classifying individuals according to the 'virulence' of their burnout symptoms. Thus, those in the most advanced stages of burnout have not necessarily passed through the previous less virulent phases. In this respect the model differs fundamentally from sequential stage models, such as the model of progressive disillusionment (Schaufeli and Enzmann, 1998).

Figure 2.4 Golembiewski's Eight Stages of Progressive Burnout

	I	II	III	IV	V_	VI	VII	VIII
DEP	low	high	low	high	low	high	low	high
PA(r)	low	low	high	high	low	low	high	high
EE	low	low	low	low	high	high	high	high

2. 12 Conservation of Resources (COR) Theory

An alternative model to Golembiewski's conceptualisation of burnout is a new general theory of stress termed Conservation of Resources (COR). This perspective on stress by Hobfoll and Freedy, (1993) and Hobfoll and Shirom, (1993), has particular relevance to burnout in work organisations, is compatible, too, with Lazarus and Folkman's (1984) transactional model of stress-coping, and has been used as a framework for recent empirical research in the field of burnout (Cooper, Dewe and O'Driscoll, 2001).

COR theory is pitched at a more general (and abstract) level than other models and, as mentioned previously, accords well with the transactional approach. Rather than providing a specific model of burnout itself, it focuses on the general conditions under which job related strain and burnout arise. COR theory also highlights the environmental factors which may contribute to burnout development which is of particular importance in this research. As this

model has been used as the framework for this research, a description of the COR model is discussed in further detail in 2. 13 below.

2. 13 Conceptual framework

Research into teacher burnout must be based on a valid model. A conceptual model was needed to provide a firm basis for the research design. The purpose of this section is to refine this model into one which is relevant specifically to teacher burnout and useful to this research. Hobfoll and Shirom (1993) have promoted the Conservation of Resources (COR) model of stress and burnout which has recently been utilised as a framework for recent empirical work in the field of burnout. This perspective on stress by Hobfoll and Freedy, (1993) and Hobfoll and Shirom, (1993) has particular relevance to burnout in work organisations, and highlights environmental factors which may contribute to teachers development of burnout. It also incorporates and gives recognition to the transactional perspective of stress which conceptualises stress as a dynamic interaction between people and their environment, emphasising the way individuals perceive and react to situations and the general conditions under which job strain and burnout arise. The need to get teachers perceptions of their environment in this research was complemented by using ethnographic methods where the researcher could get in-depth perceptions of differing work environments.

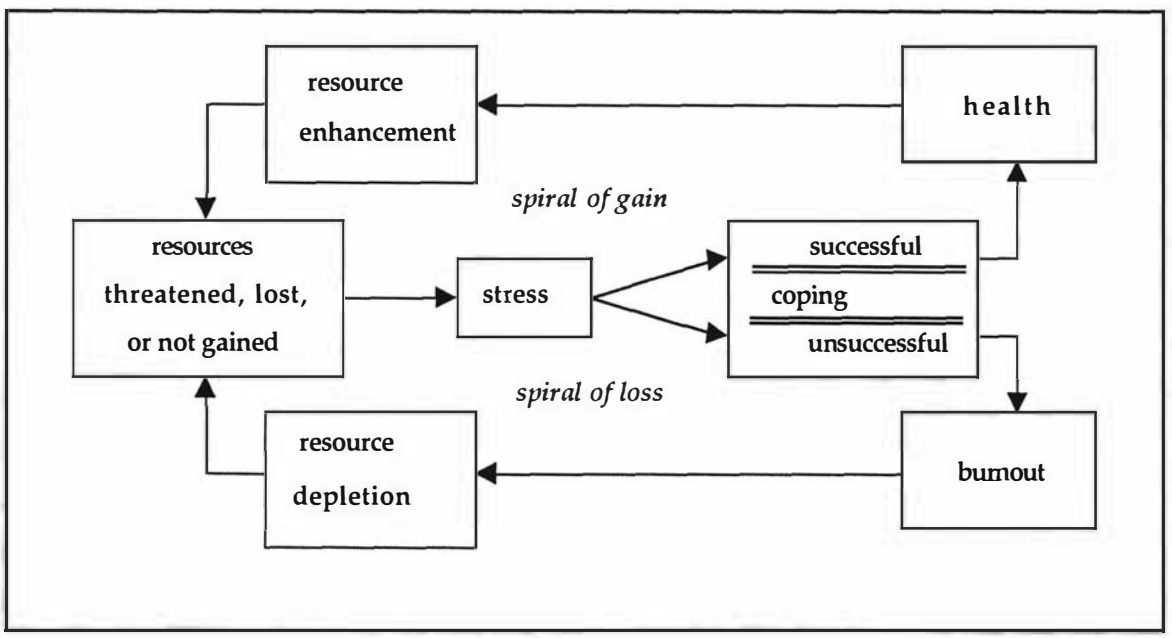
Figure 2.6 below is an extension of the derived model but applied specifically to teacher stress. According to this theory, teachers have access to four major categories of resources: objects (e.g. curriculum resources, good students etc.), conditions (e.g. supportive school network, job stability, changes in educational administration), personal characteristics (e.g. social skills, self esteem), and various forms of energy (e.g. wages). In essence, stress occurs when teachers are threatened with the loss of resources, actually lose those resources, or fail to (re)gain resources after they have been invested (e.g. failed promotion despite hard work). Losing one's job, bad health, serious student misbehaviour, or excessive workload are considered serious forms of resource loss. Teachers may deal with the resulting stress by allocating or investing resources, and may be compensated by a resource gain (such as finding a better job).

Building up a pool of resources is essential, such as having a supportive syndicate team. Developing self esteem or time management skills acts as an insurance policy which allows the teacher to cope more successfully with future stressful events. If the teacher's coping is unsuccessful and prolonged, job stress

or burnout may develop. Burnout in this model is 'a process of wearing out and wearing down of a person's energy, or the combination of physical fatigue, emotional exhaustion and cognitive wear-out that develops gradually over time'. (Hobfoll and Shriom, 1993, p.50). Burnout occurs when the teacher's loss of valuable personal resources, e.g. physical vigour, emotional robustness, and cognitive agility, is perceived as not able to be replenished. This resource loss is experienced in response to job demands and cannot be compensated for by expanding other resources such as social support, self-esteem, or physical fitness. At the advanced stages of burnout, the teacher develops a sense of helplessness (to address the situation), hopelessness (for any improvement), and depression.

In this theory, the symptoms as well as the causes of burnout are described in terms of resource loss. Figure 2.5 below illustrates the spiral of loss burned out teachers are caught in: because resources at work are threatened, lost or not sufficiently gained (e.g. role ambiguity, interpersonal conflict, failed promotion). Additional personal resources (e.g. stamina, social skills, support network) have to be spent in order to cope successfully with the resulting stress. With these resources lacking, coping fails, burnout intensifies and resources are further depleted. The burned out teacher is not able to allocate the appropriate resources, because they are drained.

Figure 2.5 Conservation of Resources (COR) Model of Burnout



If sufficiently debilitating in its effects, burnout has consequences for others in the school, for example, a school's organisational climate and staff morale may be affected. Before addressing specific studies relating to teacher stress and burnout, the methods used to assess and measure the extent of burnout by individuals in their work environment will be discussed.

2. 14 Measurement of Burnout

Measurement is an important issue in the study of burnout. Psychological characteristics can be assessed by observation, interview or self-report. Additionally, physiological parameters such as heart rate, blood pressure, and adrenaline or cortisol levels can be used. Early studies in the area of burnout were primarily observations of human service workers by Freudenberger and others. However these observations were seen as neither systematic nor standardised and in the late 1970's efforts were directed towards developing questionnaires and inventories to assess self-reported levels of burnout. Perhaps the best known do-it-yourself inventory is the Freudenberger Burnout Inventory (FBI) (Freudenberger and Richelson, 1980, pp. 17-19). Typically, do-it-yourself inventories have not been studied empirically, and are based on the authors' definition of burnout, with norms being arbitrary and interpretations therefore not strictly valid.

Two questionnaire measures that have featured consistently in the research literature include the Burnout Index (BI), (Pines, Aronson and Kafry, 1981) and the Maslach Burnout Inventory (MBI), (Maslach and Jackson, 1981, 1986; Maslach, Jackson and Leiter, 1996).

Burnout Index (BI)

This 21 item instrument is a one-dimensional questionnaire used to measure burnout. This measure uses a 7 point frequency rating, with end points of 'never' and 'always', and an overall burnout score is derived by computing the person's mean score across the 21 items. The 21 exhaustion items (none of them refer to the work situation) include for example 'being tired' and 'feeling weak' (physical exhaustion); 'feeling depressed' and feeling 'burned out' (emotional exhaustion); 'being unhappy' and 'feeling rejected' (mental exhaustion). The BI appears to be a highly reliable instrument with internal consistency coefficients exceeding .90 The stability of the BI is also relatively high as indicated by test-retest coefficients (r) ranging from .66 to .89 across 1 and 4 month interval, respectively (Pines and Aronson, 1988).

Empirical evidence from Schaufeli and Van Dierondonck (1993) did however challenge the one-dimensionality of the BI. Although the authors distinguish conceptually between the three kinds of exhaustion (physical, mental and emotional), they suggest the existence of three different, reliable and interrelated dimensions that do not concur with those that are included in the definition of burnout as used by Pines and Aronson. Factorial studies of the BI have typically obtained just a single dimension and there has been little attempt to apply confirmatory factor analysis to the Burnout Index. Schaufeli and Van Dierondonck (1993) have reported confirmatory factor analysis data which indicated a better fit for a three-dimensional model of the BI than for a one-dimensional structure. Thus while the utility of the BI is confirmed, exploration of the construct and predictive validity is warranted, as an alternative to the MBI.

Maslach Burnout Inventory (MBI)

The most popular and widely used measure of burnout is the Maslach Burnout Inventory (MBI), Maslach and Jackson, 1981, 1986), which was introduced in the early 1980's. The second edition was published five years later, and recently the third edition has been published (Maslach and Jackson, 1996). As mentioned previously, the MBI test authors describe burnout as a three-dimensional syndrome that is characterised by emotional exhaustion, depersonalisation, and reduced personal accomplishment. The original MBI is a self -report questionnaire containing 22 items, divided into the three subscales stated above. This version asked respondents to report both frequency (never, to every day) and intensity (very mild to very strong) for each item. The intensity dimension was however abandoned (in the 1986 modification) as both ratings were extremely highly correlated ($r>.80$) (Schaufeli & Enzmann, 1998).

Studies of the construct validity of the MBI are numerous and tend to support the construct validity of the instrument. Convergent and discriminant validity have also been positive, indicating that the MBI scales measure the same construct as do other burnout instruments such as the BM. Emotional exhaustion appears to be the best validated dimension. For example, Kalliath, Gillespie, O'Driscoll and Bluehorn (2000) conducted a confirmatory factor analysis of the MBI. They observed that emotional exhaustion was found to be the most robust of the three MBI factors and that personal accomplishment did not form a coherent factor. The resulting two factor instrument showed good reliability and predictive validity, indicated by significant negative correlations with variables such as job satisfaction, organisational commitment and

significant positive correlations with turnover intentions. Sixma, Bakker & Bosveld, (1998) also found good predictive validity for the MBI. Among Dutch general practitioners, initial levels of emotional exhaustion predicted their dropping out of the profession in the next five years, and other independent predictors included gender (female), work experience, and number of patients.

The Modified MBI

In 1996 Maslach and colleagues published a version of the MBI which was modified for use in non-service occupations (Maslach and Jackson, 1996). This version MBI-GS (General Survey) contains 24 items, with burnout "pertaining to any occupation in which people are psychologically engaged in their job" (p.240). Although emotional exhaustion is still conceived by Maslach as the fundamental dimension of burnout, it is also suggested that the cynicism dimension may in fact be more critical to burnout than depersonalisation. Although this more recent MBI version looks promising, this thesis used the 1986 MBI Educators Survey as it was suited to the teacher's work environment. Moreover, data collection took place just prior to release of the revised version.

2. 15 Correlates of Burnout

Correlates of burnout can be grouped into three major categories: individual (or personal), job, and organisational. Many of the stressors which fall in these categories are comparable to job strain, although some appear to be more specifically associated with burnout. Some investigators differentiate between antecedents and consequences of burnout, although it is not always possible to classify variables clearly as causes or outcomes (Cooper, Dewe and O'Driscoll, 2001). With this point in mind, this thesis will refer to these variables as correlates, rather than differentiating between predictors (or causes) and outcomes of burnout. Before discussing studies dealing directly with teacher stress and burnout the three major categories (individual, job and organisational) of correlates of burnout will be briefly discussed.

Individual Level Correlates

Demographic variables (such as gender and age) represent examples of variables studied at the individual level. Gender has been frequently investigated as a correlate of burnout, although findings for this variable are varied. Although there are some studies showing that burnout occurs more often among women than among men (Maslach and Jackson, 1981b; Bussing and Perrar, 1991; Poulin and Walter, 1993a), the opposite is also found (Price and Spence, 1994; Van Horn et al; 1997). Women have, however tended to score

slightly higher on emotional exhaustion, whereas men scored significantly higher on depersonalisation (Schaufeli and Enzmann, 1998). This can be partly explained by sex-role stereotypes. For example, it has been argued that women are more emotionally responsive and seem to disclose emotions and health problems more easily (Ogus et al, 1990). Also, women tend to be more represented in human service professions where burnout has been most studied.

Age is the most consistent factor related to burnout (Mor and Laliberte, 1984; Birch et al, 1986; Poulin and Walter, 1993a). Among young employees, burnout is observed more often among those aged over 30 or 40 years. This is in line with the observation that burnout is negatively related to work experience. Burnout seems to occur later rather than at the beginning of the career. For instance, Maslach (1982b) found that psychiatric nurses burned out about one and a half years after starting their careers, attorneys after two years, and social workers after two to four years.

Despite the obvious relevance of personality variables such as 'hardiness', and individuals denoted as 'feeling types' or 'thinking types', little attention has been given to these variables in empirical research, and evidence for their association is inconclusive. More attention has been given, however, to attitudinal variables such as job involvement, job satisfaction and commitment to the organisation. Lee and Ashforth (1996) reviewed studies which have explored the relationship between Maslach's burnout dimensions and these three work attitudes. Negative relationships were revealed between emotional exhaustion and organisational commitment, and between depersonalisation and both satisfaction and commitment. Job involvement, on the other hand, was not significantly aligned with any of the three burnout components.

Despite researchers' interest in personality and attitudinal correlates of burnout, the predominant research focus has been on job related and organisational factors (which was of particular relevance to this thesis), particularly because of the more obvious implications for interventions to reduce burnout levels. Researchers have also reached the conclusion that although a person's characteristics and personality establish to a certain degree the propensity to burn out under certain work conditions, the main cause for the majority of cases of burnout is environmental (Cherniss, 1980; Etzion, Kafri, and Pines, 1982; Farber, 1983; Friedman and Lotan, 1985; Kahn, 1974, Maslach, 1978; Pines and Aronson, 1981; Pines, Kafri, and Etzion, 1980; Shirom, 1987).

Job and Organisational Correlates

Research on job characteristics related to burnout has focused particularly on role demands, including role ambiguity, role conflict and role overload. Role conflicts occur when conflicting demands in the job have to be met. Role ambiguity occurs when no adequate information is available to do the job well. Numerous studies have demonstrated positive links between each of these variables and burnout, especially emotional exhaustion and depersonalisation (Burke and Richarson, 1993; Schaufeli and Buunk, 1996). According to a meta-analysis study by Pfennig and Husch (1994), role conflict (49 studies) shares 24% of variance with emotional exhaustion, 13% with depersonalisation, and only 2% with personal accomplishment. The percentages for role ambiguity (38 studies) are 14%, 8%, and 10% respectively. This evidence suggests employees are more likely to experience more emotional exhaustion if role conflict and or role ambiguity are present.

Also of considerable relevance to burnout among helping professionals are work load and time pressure which account for 25-50% of the variance of burnout, especially of emotional exhaustion. A meta-analysis by Lee and Ashforth (1996) showed that workload and time pressure share on average 42% (six studies) and 25% (five studies) of variance with emotional exhaustion. Other job demands such as the number of hours worked per week, the amount of direct client contact, caseload, and severity of clients' problems, are only studied occasionally (Schaufeli and Enzmann, 1998). These correlations with burnout are lower but nevertheless in the expected directions: employees experience more burnout when they have more hours per week, interact frequently with recipients, have high caseloads, and have to deal with severe recipient problems (Maslach and Jackson 1984b; Gibson et al, 1989).

Management processes play a vital role in either creating or alleviating burnout among employees. Where individuals are involved in decision making in their job and can determine important work processes, burnout is less likely to occur. Participation in decision making and autonomy have been found to be consistently negatively related to burnout, although the relationship with autonomy has been found to be much weaker. A meta-analysis of six studies revealed that participation in decision making contributes 10% of the variance of emotional exhaustion, 3% of depersonalisation and 9% of reduced personal accomplishment, whereas the percentages for autonomy (11 studies) are 2%, 2% and less than 1% respectively (Lee and Ashforth, 1996). However, at least six

studies that show higher correlations of autonomy with burnout, especially with reduced personal accomplishment are not included in this meta-analysis. In these studies percentages of explained variance vary from 3% to 18%. (Schaufeli and Enzmann, 1998).

Organisational climate has also been seen to contribute to the development of burnout and has received attention from researchers. O'Driscoll and Schuburt (1988) found that the lack of communication between organisational levels and influence processes used by managers were strongly related to burnout among social workers, while participation in decision making was associated with reduced levels of burnout. Schulz et al. (1995) also observed that in organisations possessing a 'clan' culture, characterised by teamwork, participation and autonomy, employees displayed less burnout because they functioned in favourable work conditions.

Another important organisational variable that has consistently been linked with burnout reduction is social support. Schaufeli and Enzmann (1998) noted that clear evidence exists for a positive relationship between lack of support and burnout. A lack of social support from supervisors is especially related to burnout. Lee and Ashforth, (1996), (13 studies) show that on average, lack of support from supervisors explains 14% of the variance of emotional exhaustion, 6% of depersonalisation, and 2% of personal accomplishment. Lack of feedback has also been positively related to all three dimensions of burnout. Although there are only a few studies available, they are consistent: a meta-analysis of six studies showed that lack of feedback explained 18% of the variance of emotional exhaustion, 12% of depersonalisation, and 9% of reduced personal accomplishment (Pfennig and Husch, 1994). Two studies that link social support with burnout reduction were conducted by Greenglass, Burke and Konarski (1998) and Jackson et al (1986). The former found that support from co-workers led to reduced emotional exhaustion among female teachers, while both supervisor and co-worker support increased personal accomplishment in their male colleagues. The latter obtained significant increases in teachers' personal accomplishment when support was given from the principal.

Hobfoll and Freedy's (1993) 'Conservation of Resources' theory suggests that support is a resource which can energise individuals, and enable them to deal with stressors in their work environment. However, the ability to harness this support and the nature of the support available are likely to affect this variable.

Overall, there are clear indications that organisational variables, along with individual and job-related factors, can make a difference to burnout levels experienced by individuals. Workers functioning in organisations that foster collaboration and cohesion, participation in decision making and provide constructive feedback and support as well as acknowledging the individual's efforts are less prone to burnout and other stress related symptoms.

2. 16 Studies on Teacher Stress and Burnout

Although stress and burnout research have progressively overlapped, the research on teacher burnout increased in about the 1980's. As mentioned previously, the result has been confusion between stress and burnout, with many people using the terms synonymously. 'Burnout' became a commonly used term for teachers to describe everything from inability to handle intimidating administrators to discouragement over disruptive students (Gold and Roth, 1993), however it is now being understood as the more extreme result of long term teacher stress, resulting in total exhaustion. When this feeling becomes chronic, teachers find they can no longer give of themselves to students as they once could. Teachers who no longer have positive feelings about their students experience the second component of burnout, depersonalisation. The third aspect, a sense of low personal accomplishment from the job, is particularly crucial for teachers, as most teachers enter the profession to help students learn and grow. The state of burnout in teaching may lead to a number of outcomes such as feelings of apathy, alienation from work and withdrawal into a number of defensive strategies, such as displaying indifferent, negative attitudes towards their students, using derogatory labels, physically distancing themselves (e.g barricading themselves behind their desk) and tuning out students through psychological withdrawal (Travers and Cooper, 1996).

The research published on teacher stress over the last 20 years has indicated that most teachers experience some stress from time to time, but that some of these teachers will experience the more extreme, long term effects of stress, burnout. The most prominant stressors emerging both from both New Zealand and international studies have included: pupil behaviour and/or progress, work overload and/or time pressures, having multiple roles and extra duties, unsupportive parents, lack of support and difficult staff relationships. Other frequently mentioned stressors include professional recognition needs, changing curriculum demands or reorganisation within the school, measurable goal

achievement requirements, lack of trust in teachers' professional adequacy, job security, poor working conditions and disagreeable physical environments.

The final section of this chapter reviews teacher stress and burnout research looking at New Zealand and international studies up to the late 1990's. This review first looks at biographical or demographic variables in relation to burnout, then focuses on studies outlining recurring stressors in the teaching environment as mentioned above. This section also reviews qualitative studies of teacher stress, highlighting organisational stressors intrinsic to the teaching environment.

Biographical Variables

A review of research on teachers' stress and biographical variables such as sex, age, experience, and position have provided important insights into the nature of stressor relationships. While there is contrary evidence regarding the significance between these variables and stress, it is important to acknowledge that biographical variables do have a part to play in teachers' perceptions of stress. Kyriacou and Sutcliffe's (1978) study and the research of Borg et al., (1991); Brown and Ralph, (1992); and Pierce and Molloy, (1990a), all found no significant relationships between biographical variables and stress. However four studies by Williams (1981), and Laughlan, (1983), Coates and Thoresen (1976) and Friedman (1991), have found that biological variables do play a major role in teachers' perceptions of stress. These studies found that sex, age, type of school (i.e. primary or secondary), positions held, and qualifications can be significant in predicting stress among teachers.

The study by Williams (1981), sampled 956 teachers in Alberta Canada using the 'Organisational Stress' instrument. Factor analysis provided five factors that contributed to teacher stress including: relationships with students, relationships with colleagues, teacher tasks, work load and job security. Relationships between stressor factors and biographical variables found that females reported statistically significant greater stress than males on factors related to job security and work load. Age differences showed 25-34 year olds had more stress from workload and colleague relationships than others, whilst job security was an important stressor for teachers with less than two years experience.

Laughlan's (1983) study of 508 New South Wales primary and secondary teachers, found significant relationships between four stressor factors: pupil recalcitrance, time-resource difficulties, professional recognition needs and

curriculum demands. Laughlan (1983) found that young teachers perceived greatest stress from pupil recalcitrance while older teachers reported much higher stress levels from curriculum demands.

The biographical variables of age and experience were also found by Coates and Thoresen (1976) to be linked to high levels of stress. This study concluded that younger and less experienced teachers felt greater stress than their colleagues from pressures associated with discipline, poor promotion prospects and management issues.

Friedman's (1991) research used both qualitative and quantitative methods in examining school factors associated with teacher burnout. The organisational characteristics of six high burnout schools and six low burnout schools were identified and compared in order to describe differences in the climate and culture. Stage one of the study included 1,597 teachers from 78 elementary schools who completed the Maslach Burnout Inventory. From this survey twelve schools were selected as part of stage two which involved interviewing staff, general observations, and attending staff meetings. Four major school culture variables were indicated to contribute to teacher burnout. These were: the drive toward measurable goal achievement behaviour imposed on teachers by school administration; lack of trust in teachers' professional adequacy, a circumscribing or a restrictive school culture, and disagreeable physical environment. The biographical factors that were found to be significantly different and linked to high burnout were age, (the teachers were older); sex, (the high burnout schools employed fewer female teachers than the low burnout schools); level of education, (the teachers' levels of education were lower in the high burnout schools); and years of experience in teaching, (in the high burnout schools, the teachers had more experience in teaching than in the low- burnout schools).

New Zealand Studies

Early research on teacher stress in New Zealand prior to the major education reforms has found varying sources of stressors. Recurring stressors in the teaching environment have been reported by a number of writers. The unpublished studies of Borland, 1963; NZEI, 1979; and Coleman, 1981 identified a range of situations which teachers perceived as stressful. These included pupil behaviour, poor working conditions, time pressures and poor school ethos. Galloway, Panckhurst, Boswell, Boswell and Green (1982), using the Pratt Teacher-Event Stress Inventory (1978) identified other stressors which included

children's behaviour, teaching problems, children's progress, staff relationships, multiple roles and extra duties.

A study based on the lower North Island of New Zealand by Dewe (1986), used a number of methods to gain data on sources of teacher stress. The first stage involved interviewing 145 primary school teachers in order to develop a questionnaire which captured the experiences of New Zealand primary school teachers. This interview included, among other questions, a critical incident question to develop a pool of information on the causes of teacher stress. Subjects were asked to think about a time when they felt under pressure and to 'describe the sorts of things that caused pressure'. Three hundred different pressures were noted and content analysed to produce seven different sources of stress. Stage two involved a questionnaire of which 800 made up the data set. Stressful situations included those where teachers had little individual control over different school events, the expectation of parents, relationships in the classroom, unsupportive parents and difficult children, work overload and the physical demands of teaching.

International Studies

Similiar stressors have been reported in international studies, as the studies below suggest. A key feature to come out of a number of these studies is the notion of 'change', or as discussed in the introductory chapter of this thesis, the reorganisation of school life which is often due to education reforms. Many of the pressures associated with change involve increased demands on time, for example changes in the curriculum require teachers to assimilate proposed changes, examine their current practice and, in light of new requirements, make modifications. Additionally, they are expected to evaluate the success of the modifications by assessing the progress of pupils, and to review their practise accordingly Travers and Cooper (1996). Borg (1990) and Kyriacou (1989) also state, that in a period of much organisational change, there is a need for further research to provide updated information on the effects of change and on which to base an understanding of teacher stress: this thesis aims to remedy this need.

Two studies from the 1970's, Kyriacou and Sutcliffe (1978), and Dunham (1976) document the most common stressors reported to this day. The English study by Kyriacou and Sutcliffe, (1978) which surveyed 257 teachers from mixed comprehensive schools identified four sources of stress including pupil behaviour, poor working conditions, time pressures and poor school ethos. Dunham's (1976) study which involved 658 teachers in the United Kingdom,

reported that role conflict, role ambiguity, poor working conditions, relationship problems with the headmaster and lack of autonomy were significant predictors of stress. Stress was also attributed to reorganising their schools into a new comprehensive system and that 'change' or reorganisation of the schools towards the new comprehensive system caused problems.

An American study by Mazur and Lynch (1989), looked at the impact of administrative, organisational and personality factors on teacher burnout. With a sample of 200 faculty members of nine public senior high schools, a survey involving seven independant variables (demographic variables, experiential variables, school environment, health, principal's leadership style, organisational stressors and personality characteristics) were completed, along with the Maslach Burnout Inventory. Whereas some researchers have found that certain leadership behavioural style factors were predictors of teacher burnout (Chapman, 1983; Cook, 1983; Moracco, Danford and D'Arienzo, 1982), this study found that leadership style was not a significant predictor of teacher burnout. Organisational stressors such as work overload, support and isolation were found to be significant predictors of teacher burnout and as well as personality characteristics.

The work environment of the 1990's, has been characterised by Pithers and Fogarty, (1995) as a time of structural change, higher job performance expectations, increased organisational competitiveness and redundancy. This is likely to increase occupational stress levels even further and McKay (1991) sees education in Western countries as undergoing far-reaching changes, both structural and otherwise, which bear directly on the frequency and intensity of stress experienced by teachers. A study by Cox, Boot, Cox and Harrison (1988), identified change as a major factor among current sources of stress for teachers and stated that 'change beyond the control of most teachers' was a cause of stress.

A recent Australian study concerning educational change and its impact on teachers work lives was carried out by Churchill, Williamson and Grady (1997). It found that virtually all teachers reported a more harried, demanding and stressful work context. One hundred primary and secondary teachers participated in the study using both survey and interview. Teachers reported a unwelcome intensification of their work, and a similarly unwanted shift in the focus of the core elements of their work. They welcomed on the other hand, an

apparent increase in collaboration with their colleagues, and perceived improvements in aspects of teaching and learning.

Another Australian study by Punch and Tuetteman (1990), looked at job related factors of secondary school teachers that were related to stress. These were perceived as lack of efficacy/achievement, inadequate access to facilities, lack of collegial support, excessive societal expectations, lack of influence, student misbehaviour and lack of praise/recognition. Tuetteman and Punch (1992) have recently reported evidence showing that the perceived level of influence and autonomy and perceived level of efficacy and achievement (associated with control of the work environment) can have an ameliorating effect on the reported level of teacher psychological distress.

Looking at recent studies in the 1990's, a large study by Cooper and Kelly (1993) of 2,638 head teachers of primary and secondary schools, and principals/directors of higher education establishments, were surveyed using self report questionnaires. It was found that the two main sources of occupational stress as predictors of mental ill health and job dissatisfaction were work overload and handling relationships with staff. Although these findings appear similar to teacher stress studies, comparisons cannot be made between purely head teachers and teachers. It was implied although not stated that these head teachers did not teach, and their role of managing the school is qualitatively different to that of teachers who are likely to have different sources of stress, being at the chalk face.

A survey of teacher stress, job satisfaction and career commitment among 710 full time primary school teachers was carried out by Boyle, Borg, Riding and Falzon and Baglioni (1995), in Malta and Gozo. Analysis of a twenty item sources of teacher stress inventory suggested that there were five distinct dimensions to account for most of the variance in predicting teacher stress. This included pupil misbehaviour, time/resource difficulties, lack of professional recognition needs, poor relationships and high work load.

Brown and Ralph (1992) report a major study by a British Teachers' union showing the most common sources of stress as structural change, classroom discipline, heavy work loads, lack of resources and poor school management. However the effects of teacher union or industrial issues on stress research are bound to have limitations. Union members with 'an axe to grind' may not

provide data reflecting perceptions of the majority of teachers and may have biased or contaminated the research.

Qualitative Research

The amount of qualitative research on teacher's work stress is limited. Two studies by Blase (1986) and Ianni and Reuss-Ianni (1978) are discussed below. Blase's (1986) study looked at teacher's perceptions of factors related to work stress using the Teacher Stress Inventory (TSI) which was administered to different samples of public school teachers. The TSI was used on a sample of 392 elementary, middle, junior and high school teachers during 1981, 1982 and 1983. The data analysed from the TSI was coded using the constant comparative method, an inductive procedure which compares each new incident encountered in the data to incidents coded previously. Ten major categories of perceived sources of significant stress that emerged from the TSI, were: *organisational*, (e.g. time, paperwork, lack of materials, extra duties, meetings, plant size, class size, poor scheduling, interruptions, travel conflicting demands and athletics), *student*, (e.g. discipline and apathy), *administrative* , (e.g. unclear expectations, lack of support, inconsistency and lack of opportunities for input), *teacher*, (e.g. conflict of lack of co-operation, negative attitude and lack of communication), *parents*, (e.g. interference, non-support or apathy and lack of communication or understanding), *occupational*, (e.g. low salary, job insecurity and lack of professional growth), *personal*, (e.g. professional-personal conflict and conflict with personal values), *academic program*, (e.g. repetition, unrealistic goals and low standards), *negative public attitude*, and *miscellaneous*. Of these ten categories, organisationally based stressors were identified as occurring most frequently.

The study by Ianni and Reuss-Ianni (1978) involved intensive qualitative case studies of 10 schools carried out by the National Institute of Education, under a joint Congressional-Senate in a 'Safe School Study Act'. This comprehensive study consisted of three phases which gathered data on a range of issues including how school organisations can mediate the potential for stress. A number of organisational characteristics were found to be important determinants of reduced apprehension and stress among teachers. The importance of the principal's style of leadership and his/her initiation of a structure of order seemed to differentiate 'safe' schools from those that had trouble, and was a critical factor. Strong leadership meant a commitment to educational (professional) leadership, as well as control over the school. Teachers described this as an important element of feeling 'professionally in contact' with the principal's educational philosophy. The principal's ability to

initiate a structure of order in the school was particularly important. Teachers explained that they felt safer, more secure, could 'work better' and felt 'more freedom to teach' in a well-ordered school. The researchers also concluded that if a school is large and impersonal with lax and inconsistent discipline, the rules ambiguous and arbitrarily or unfairly enforced, the courses irrelevant and the reward system unfair, then the school would lack a rational structure of order and the basic elements necessary to maintain social bonds (Ianni, 1978). The study also found that self esteem and job satisfaction, commonly cited mediators of burnout, were important in mediating stress. Cohesiveness and a feeling of community among teachers, or a strong sense of identification with the school's mission were also frequently mentioned. The study also found that in the successful schools where burnout was almost non-existent, teachers and administrators ran educational programmes and behavioural development programmes under the professional banner of 'educators'.

One particular inquiry of this thesis are the levels of burnout among New Zealand teachers and American counterparts. A study by Maslach (1996) summarising mean burnout profiles from 73 United States studies (from 1987) according to six occupational fields (teaching, post-secondary education, social services, medicine, mental health and others), found that United States teachers were characterised by the highest levels of emotional exhaustion among the six occupational fields and that teachers had relatively high levels of depersonalisation (second highest) compared to other professions. These results (similar to the findings from Phase Two) indicate that overall job demands for teachers are likely to have increased during the last decade.

From this overview of teacher stress and burnout, some important considerations emerge. Firstly, the findings from biographical/demographic characteristics in relation to stress and burnout are not conclusive. Also the review provides predominantly quantitative, empirically based studies, with very little findings coming from interpretive or narrative study. Apart from Friedman's (1991), Blase's (1986) and Ianni and Reuss- Ianni's (1978) study, there has been limited research using qualitative methods encouraging free expression of teachers' personal meanings associated with work stress and burnout.

When researchers use only quantitative or highly structured methods to gain data, this may excessively control the subject's perceptions of a given phenomenon. In the area of teacher stress, inductively based, exploratory

research using qualitative methods are limited in number and few have combined qualitative and quantitative methods to give balance and meaning.

An assumption of the present study is that certain work stressors will reflect the current changes occurring in the education system. It is expected that factors similar to those found in Friedman's (1991) study will emerge, that reflect traditional work stressors for teachers such as work overload and difficulties dealing with staff, parents and students. Also expected, are new stressors reflecting the changes introduced by the educational reforms.

Conclusion

In this chapter the phenomenon and history of stress was discussed. Different conceptual models, including the transactional model adopted as a framework for the present Study, have been described. Theoretical models of burnout and the conceptual framework used for the basis of this research were also presented. The measurement and major correlates of burnout in the work environment domain were also highlighted. Lastly a focused review related to teacher stress and burnout provided evidence about the nature and occurrence of burnout and its correlates. It is apparent from this review, there is still no universally accepted definition of burnout. Accordingly, this research was undertaken to further study the nature and impact of burnout amongst teachers.

In reviewing the literature on teacher stress and burnout, while studies list factors that contribute to stress and burnout, it is clear that *understanding* the complexity of burnout in schools is required to give deeper insight. Armed with the above review of stress and burnout, attention is now turned to the issue of how low and high burnout schools differ and how school environments can be organised to reduce the exhaustion experienced by teachers.

Having outlined the theoretical literature of stress and burnout, the next chapter provides an overview of the research process explaining how the three phases of the study developed. It explains the research perspectives and methodologies used in the research and how they are based on philosophical assumptions which have arisen out of social science traditions.

CHAPTER THREE

3. 0 Introduction

This chapter provides an overview of the research process, and explains how the three phases were developed for the study. A description of the conceptual framework on which the research is based is provided. Researchers in this field are increasingly questioning the design and processes used in the research process. In designing a research method to address the aims of this study, it became important to take into account a number of methodological issues especially due to the lack of long-term and qualitative research in the area of organisational stress and teacher burnout. The research perspectives and methodologies used in educational research have been open to much debate and are based on philosophical assumptions which arise out of social science traditions.

In order to clarify the research philosophy underlying the present study, this chapter guides the reader through a consideration of four key research perspectives. A brief outline on the nature and philosophical assumptions of each is provided. The main features of the research paradigms are presented in this chapter in order to demonstrate their interrelationship and interdependence and the relevance of adopting an inclusive research perspective. It is argued that no one perspective is sufficient for understanding the complexity of teacher stress and burnout and that there is a need for a multi-dimensional paradigm which utilises both qualitative and quantitative methods.

The next section explains how a conceptual model is needed to provide a firm basis for the research design and how this research on teacher burnout was built on a 'transactional stress' model. The section then refines this model into one which is specific to teacher stress and burnout and thus useful to this research study. The last section shows the aims of the research which were developed into three research phases (Phase One, Phase Two and Phase Three), and provides a flow chart to explain this process.

3. 1 Philosophical Paradigms

The practice of doing research on teacher burnout is very much shaped by different concepts about what constitutes research. Researchers in education and psychology, and in the social sciences generally, are faced with a large set

of competing views concerning social enquiry and the selection of appropriate information gathering methods that enable new knowledge to be generated.

This complexity can best be understood through a recognition that there are different forms of knowledge and systems for representing and understanding reality. Choosing a research framework or philosophical tradition requires, as Clark (1997) has noted, a careful consideration of the philosophical assumptions underlying each perspective and a weighing up of the relative strengths and limitations in order to arrive at a reasoned and well justified preference for one's chosen research perspective over alternative choices.

The purpose of the following section is to introduce the main schools of thought that have characterised the conduct of educational research in the field of teacher stress and burnout. This requires an understanding of the different paradigms that have characterised research generally and the ways in which these paradigm shifts have influenced the conduct of research in this area. The schools of thought that have been selected to illustrate this shift in thinking are positivism, interpretivism, critical theory and postmodernism. The emergence of these rival viewpoints or beliefs concerning the research process has generated considerable debate concerning the validity of their particular methodology and has influenced research in social science from early traditions originating in the early 17th century. They have influenced the way research has been conducted and shifted the mindset of researchers and their approach to legitimate inquiry. Stemming from these paradigms and the debate concerning ecological validity of the methods they incorporate, are four key questions that relate to *ontology, epistemology , axiology* and *methodology.*

Ontology:

What is the nature of reality and what can be known about it?

This perspective questions whether there is a real world of physical objects or simply a world of ideas (Clark, 1997). This perspective considers whether the world consists purely of physical objects, that can be observed or whether there are also unobservable physical entities that relate to metaphysical realms such as God, soul and mind. Depending on how we answer this question will govern the following question concerning the meaning of reality and how we see it: should our knowledge as humans be based on observable behaviour or on the subjective ways they themselves understand the experience?

An underlying assumption of the present study is that this research assumes that for teacher burnout, teachers' observable behaviour and their personal subjective beliefs and perceptions contribute to the levels of stress they experience. Whether or not teachers are actually under stress may not be as important as their subjective impressions of how they perceive and react to situations of job strain.

Epistemology:

What is the basis of our knowledge about the things in the world?

This perspective refers to the nature of the relationship between the knower or would be knower and what can be known (Lincoln and Guba, 1994). It questions the sources of our knowledge, for example, sense experience, pure thought and intuition. Can these sources be ever be true, and thus, can our claims of knowledge be objectively true or are they relative, true for one social/cultural group, but false for another? As an example, our knowledge may be psychological, social or medical depending on our experience. Therefore the researcher needs to select a particular framework as an interpretive tool to arrive at their understandings, and needs to take into account the sources of knowledge that have been used to arrive at a particular interpretation (Selby, 1998). The sources with which to find out knowledge can include either objective or subjective methods and have been part of the debate and paradigm shift that has taken place in social science research.

For the purposes of this research, it was considered appropriate to collect both qualitative and quantitative data in order to document both objective and subjective information within the three phases of the study. This multidimensional form of analysis made it possible to interpret and provide meaning about stress and burnout in the teacher's world.

Axiology:

How should we use our knowledge of the world?

This perspective concerns our ideas and beliefs and how they are valued by the individual. How humans value and understand knowledge and how they value and understand themselves and their relationship to others is central to the axiological view. The relationship between fact and values and whether they are separate or integrally related will obviously affect a researcher's inquiry. To what extent values, be they personal, social, political or religious, influence the inquiry will also have a bearing on the selection of research methods and the interpretation of results found. The ability of the researcher to place aside their

social, political, religious and economic values to engage in the enquiry is also of importance. It is unlikely that research can be carried out at a purely objective level, but researchers must consider axiological considerations and be aware of their influence.

The view taken in this thesis is that the personal values, 'lived experience' and 'voice' of the researcher needs to be made known towards the readers in order that the readers can understand the factors that influenced the methods and interpretations arrived at in the study. As explained in the rationale for the study, the researcher's intentions are to the social and educational betterment of teachers' conditions and towards the finding of knowledge regarding facilitative and nurturing school environments. The researcher's personal values and voice is also explained in more detail in chapter six under the heading 'Maintaining Rapport and Being an Ethnographer' (6.10). This section explains how the researcher 'pierced the surface veneer' of the schools studied, and how she established confidence with those who were being researched. Being able to get beneath the surface of the school's culture helped the researcher move beyond her own limited perspective.

Methodology:

How can enquirers go about finding out what they believe to be known?

This perspective concerns the procedures a researcher will use in order to gather information in an inquiry. A distinction must be made between 'method', as in collection process, and 'methodology' as this pertains to the theories and conceptual frameworks that are used to determine the most appropriate 'method' adopted in the study. Whereas traditional empirical research tended to rely on a single method, many contemporary studies in the field make use of multiple methods that are both quantitative and qualitative in their approach (Soltis, 1984). However this methodology question as discussed by Lincoln and Guba, (1994) must be fitted to a predetermined methodology which pertains to a theory or conceptual framework; it is not just an information collection process.

In recognition of the above philosophical discussion, the following section will briefly outline the four main schools of thought concerning social science research providing key concepts and central ideas that have informed this research. Although there are many variations within each paradigm they should not be seen as fixed positions but open to debate and useful as aids to understanding the nature of enquiry.

3. 2 Positivism

The positivist paradigm, also known as logical empiricism or post positivism, emanated from natural sciences at a time when people believed that scientific thinking required us to extract phenomena from the real world, break them down into constituent parts and after examining them closely, reassemble them conceptually or actually in order to understand how things happen. This can also be called reductionist thinking and derives from a rational model of thought which believes that some rational order and system underlies the confusion and ambiguities that are obvious in the world around us. It has long been assumed that powerful scientific explanations would be those that could be proved by using empirical means based on mathematical algorithms. This assumption has dominated the discourse of science for some 400 years (Lincoln and Guba, 1994). Indeed many of the stress theories have emerged from traditional rationalistic, reductionist thinking intended to produce mathematically demonstrable certitude. A recent study, by Kinnunen and Salo, (1994), on teacher stress and health illustrates the continued use of highly empirical use of data collection; this study involved the use of 17 repeated questionnaires and urine samples.

Positivism, although enduring, became a target of criticism and rejection based on debate over the foundational base of scientific knowledge. Neurath, for example, rejected the notion that sense data (observations) could ground empirical theory, and there was major disagreement over the status of unobservable entities. That is, our theoretical explanations often invoke unobservable phenomena to account for the behaviour of the things we do observe (Clark, 1997). Of the many criticisms, positivist thought has been roundly condemned by philosophers who point to its limited conception of science and its failure to take heed of subjective experience and interpretive meaning. Research into the phenomenon of teacher stress and burnout has also tended to rely primarily on quantitative methods characteristic of the positivist paradigm. Methodologies have commonly included highly structured survey instruments, which, as (Blase, 1986) has noted, may excessively control the research respondents' responses so that they do not accurately reflect the respondent's perceptions of a given phenomenon.

The post positivist critics such as Popper, Kuhn and Lakatos accorded science high status and although they rejected the logical character of science they attempted to find a middle ground which was logically sound and historically

bound. Feyeraband, (1975), however, was to provide a contrary perspective on scientific enterprise, denying that there was anything special about science and scientific knowledge. He favoured pluralism in order to enhance the liberty of people to make choices: 1) methodological pluralism - there is no one scientific method which is objective and universal; 2) theoretical pluralism - there should be multiple theories (thus our assumptions can be challenged); 3) ideological pluralism - science should be compared with alternative ideological systems (magic, mysticism, religion, etc.) and it may be rejected (Clark, 1997).

In summary, while there are compelling reasons for adopting empirical forms of enquiry, it is essential that studies do not merely imitate experimental conditions of natural science. The shortcomings of 'reconstructed' forms where researchers write up and justify their findings, often omitting much of what they actually did and thought during the research process, has been soundly criticised (Clark, 1997). Indeed Freyeraband's (1975) view that science is only one of a number of competing ideological systems and that there can be no one scientific method broad enough to cover all the methods of science is now a popular view and consistent with interpretivism, offers an alternative, non scientific account of social inquiry.

3. 3 Interpretivism

Recognition that science was not the only mode of knowing led to the interpretivist approach to educational research. This approach starts with a different set of premises and involves numerous strands incorporating agreement and diversity. What distinguishes human beings from the rest of their environment is their ability to use language and give meaning to their experience. To understand human behaviour, researchers are to focus on interpreting the meanings research participants give to their experience, which can be called hermeneutic. Hermeneutics is a method for gaining knowledge through the understanding of life and its expressions. The methodological emphasis is on interpretation with the aim being to reach and promote an understanding of the meaning of individual's life conditions, human products and social phenomena (Odman, 1992). In the present research the hermeneutic approach was applied in the analysis of how the interview participants experienced stressors in their particular school. The interview respondents' statements were both explained and understood in a dialectical process (an interpretation of the interviewee's experience of the phenomena).

Thus interpretive enquiry draws a sharp distinction between interpretation which aims for subjective understanding and experimentation which seeks empirical explanations. The interpretivist paradigm leans towards the relativist or constructivist view of the world which in extreme denies the existence of a real world (Hughes, 1990). The relativist claims that individuals construct their own versions of reality and the researcher is acknowledged to wear a 'theoretical lens' that results in inherently biased, value laden and subjective observations (Lincoln & Guba, 1985).

This differentiation of experimentation and interpretation has also given rise to the distinction 'quantitative' versus 'qualitative' research. Researchers in the interpretivist tradition can adopt both qualitative and quantitative methods.

While interpretive researchers use subjective evidence, these researchers, however, seek to engage in objective and value-free enquiry by being aware of their own values and beliefs and they seek to provide interpretations as to why participants act or perceive in the world the way they do. As mentioned above, while presenting the 'lived experience' of the participant, the researchers seek to disengage from that experience and objectify it; in other words they adopt a disinterested stance towards findings. A criticism of this approach is the difficulty attaining a line or a distinction between the object of investigation and the investigator. The paradox of how to develop an objective interpretive science of subjective human experience therefore arises.

The amount of research in the area of occupational teacher stress using a detached interpretivist perspective is noticeably limited. While there have been a few studies, such as Blase's (1986), which used qualitative techniques to subjectively describe the sources and meaning of work stress, studies incorporating 'objective', value-free methodologies using subjective evidence have been noticeably limited. The shortcomings of focusing exclusively on experimental research are that it omits too much of what is human and meaningful to the participants and in its rigid control excludes the voice of the participants.

Therefore, in recognition of these concerns, it was decided to incorporate subjective forms of enquiry as part of this research in order to find out *why* teachers were feeling emotionally exhausted, what were *their* reasons for feeling under strain, and what were *their* perceptions of their work organisation and their contribution to these feelings. This form of enquiry

included the 'voice of the participant' and enabled a richer, more meaningful collection of data which sought to understand through the analysis of those concerned, what was happening within their respective high and low burnout work environments.

3. 4 Critical Theory

Educational researchers have embraced critical theory as a way of retaining the merits of science and interpretivism but transcending the limitations. The dilemma posed by the dualism of bringing positivist and hermeneutic (interpretive dialogue) together, has been transcended by using critical theory as a unifying philosophical framework to retain the strengths of the scientific and interpretive enquiry, yet goes beyond what they have to offer (Clark, 1997). Critical theory as espoused by the Frankfurt School, assumed that specific social and political 'givens' colour any data with which they deal (Horkheimer, 1972). In contrast, the more established methodologies in social science research which derive from positivism and rationalism, assumed that the process and products of data gathering can take place in a neutral or a natural context (Fay, 1975).

The critical theory approach to research maintains that bias necessarily grows out of the interests of those who commissioned the research and from the prejudices of the researchers (Horkheimer, 1972). The critical approach is based on a combination of theories and cannot be seen as unified except in the sense that positivism is rejected and emancipation is achieved. It believes that science is only one form of possible knowing and adopts a form of historical analysis. Critical theorists argue that social science should engage in a critique of ideology in order that the researcher gains authentic insight, and that the empirical should be tested within a context of self reflection. This critical examination of social phenomena will liberate people from sources of domination, repression and subjugation and will result in more enlightened observations (Carr and Kemmis, 1983).

The critical theory approach has a bias of its own, as proponents admit. For example the critical approach would tend to interpret burnout as a specific example of alienation in a capitalist society. Teacher burnout would be seen as an inevitable outgrowth of a 'repetition of ritualised tasks' (Friere, 1979). According to this point of view, many teachers, accustomed to a prescribed curriculum, have lost their desire to be spontaneous in their work with children (Sakharov and Farber, 1984).

A study of teacher burnout that employed the critical theory method was carried out by Sakharov and Farber, (1984). Their aim was to establish an interpretive dialogue which would attempt to explore the meanings and themes of work that derive from professionals' personal and social histories. This study had a critical social scientific intention in that it focused on the interplay between subjective experience and objective conditions. The interviews therefore included questions dealing with personal history as well as questions that focused on an individual's current perceptions of work. The methodology of this study sought to facilitate subjects' willingness to be self-critical as well as critical of the systems within which they worked. The authors confirmed their hypothesis that burnout was an instance of alienation, a crisis of individual psychology that can be viewed as part of a larger cultural and social-political-economic problem. Further results from their study indicated that burnout did not start with the isolated teacher in the classroom but was part of a configuration of factors that affect and are affected by personal histories. Such views about alienation and individual crises being embedded in the larger cultural, social and political context point to the importance of studying the work environment and the whole ecology.

Despite the bias of critical theory, it has been a useful method and unique in its ability to elucidate those aspects of individual, institutional and social factors which taken together generate teacher burnout. While it is not the aim of this study to prove that teacher burnout is due to alienation in capitalist society, teachers in this research were questioned about the impact of education administration changes and whether these reforms affected their work load and levels of stress.

3. 5 Postmodernism

The influence of postmodernism is limited in relation to educational research although its influence is beginning to grow in popularity. Post modernism is a response to modernism, (i.e. to the ideals of enlightenment science), particularly to the twin doctrines that science is a form of discourse and that scientific knowledge greatly enhances the opportunities for human emancipation (Clark, 1997). Postmodernism claims that under capitalism modern science restricts human freedom rather than promoting it. Thus the role of science in educational research is limited to being one of many narratives of inquiry, sitting alongside history, philosophy, interpretivism,

story-telling, and so on. As a mode of inquiry, science is placed as one among equals, rather than superior to the rest.

Postmodernism views reality as a text that can be studied, because it is socially constructed. Feminism and multiculturalism have been major political consequences of postmodern thinking and have had a powerful effect on our rewriting of educational practice (Reid, Robinson and Bunsen, 1995). Indeed great strides have been made to create a voice for the previously silenced-minorities, women, children, people with disabilities and to resist the "technologies of repression and representation that dominate the current historical moment" (Denzin, 1991, p.27). The educational agenda is to promote students' freedom and responsibility to create an autonomous self, rather than to prepare students to perform in employment and other settings (Foucault, 1984).

Postmodernism is about expanding one's consciousness, and the relationship between knowledge and power. These theorists state that we have accorded science the status of being truthful and objective when in fact, it is socially constructed. Knowledge is socially constructed by scientists engaged in politically motivated competitions for money, good students and scientific reputations for example (Harraway, 1991). Indeed at the core of postmodernism is the doubt that any method or theory, discourse or genre, tradition or novelty, has a universal and general claim as the 'right' or the privileged form of authoritative knowledge (Richardson, 1994). Thus it suspects all claims of masking and serving particular interests in local, cultural, and political struggles. Postmodernists do not seek to eradicate science, however as no method has a privileged status. They urge, for example, women to be active in scientific endeavours and for researchers to understand the ways science has been used to exercise power through authority and exclusion.

The critiques of this paradigm are many and have caused little consensus and a great deal of confusion and animosity. Scheurich (1994) adopts the extreme position that it is unclear whether postmodernism can do any useful educational work at all. Included among others is the fact that it strips science of its explanatory power and fundamental epistemological position and seriously misrepresents the nature of knowledge (Clark, 1997). Hargreaves (1994) critiques postmodernism by implying that "all that is available, analytically, to the post modern theorist is the practice of deconstructing existing versions of social reality, and of giving voice to other versions which are normally

neglected or suppressed" (p.39). While Hargreaves (1994) is implying that deconstruction and giving voice are not sufficient, other authors such as Packwood and Sikes (1996) suggest that what is sufficient will depend upon the perspective of, and the discourses used by, researchers and their readers and some will not agree with Hargreaves. They suggest however that there is a danger that research methods and approaches that solely reflect personal experiences and emotions lead to self-indulgence and narcissism rather than to enhanced understanding and useful ways of viewing the world.

Postmodernists would respond however that it takes a lot of courage to decide that one does want to change the accepted metaphor of 'research as recipe' to one that is personally as well as professionally meaningful. Especially as there is a great pressure on researchers to provide a positive presentation of self to the potential audience of colleagues as a proper, scientific researcher. Also, traditional authority often dictates that the author construct a privileged representation of a given social reality in which the motivations and the intentions for writing remain covert. Thus the author attributes a single, correct meaning to the text, and there is a deliberate distancing, both from the reader and from the data, with 'others' written about as if they were discrete objects. (Nespor and Barber, 1991).

Nias' (1989a) reflexive account of primary school teachers adheres to postmodernist ideals in that she clearly reveals her motivations and intentions for the research. Her aim was to capture (as near as possible in the words of the teachers themselves) a detailed and comprehensive picture of the subjective reality of primary teaching. She reveals her personal experiences and problems that arose in the research, and emphasises how, as a researcher, she did not distance herself from the participants but emphasised her presence to the teachers as a guest, not to evaluate and not in a judgmental capacity. Also relevant to this paradigm was the author's desire to move beyond her own perspective and release herself from the biases which she knew would come into her data.

Despite Nias's (1989a) own admission of the weaknesses in her research (which can be seen also as an honesty and a strength of this paradigm) which includes a crude and simplistic methodology, this study also has its benefits and strengths. One of these is the simplicity of the research design and the uniform format of data presentation. She states "my experience as a supervisor and examiner of higher degrees has taught me that operating and justifying

complex data collection and analysis can become an end in itself and an excuse not to wrestle with the ideas embedded in the evidence" (p.162). Another benefit of this research came with the long time spent on the study, which in her admission 'caused periods of ambiguity and confusion', but seemed necessary in order to *know* the data intimately and which generated patterns, interconnections and insights often dearly missed in short term quantitative studies. Indeed Nias clearly reveals the intentions of qualitative research when she states, "the picture which I have painted reflects the world which teachers themselves inhabit and yet helps them to see it, and themselves within it, in fresh ways"(p. 163).

While this thesis does not reveal the researcher's personal experiences and problems as Nias (1989a) has done, the post modern paradigm has contributed and informed this research in that there has been an attempt to reveal the motivations behind the research and to provide a comprehensive picture of high and low burnout environments using the subjective experiences of the respondents. This included the use of self reflective analysis, thick description, observation and journal/diary reports.

In sum, it can be seen that all of the above perspectives have to some extent impacted on the decision making about the research methods to be adopted in the present study. In its purest form, positivism views humans as passive and determined by exogenous causes (Hughes, 1990) and not seen as significantly different from other phenomena explained by the methods of the natural sciences. In contrast, interpretivism, with its constructivist view of knowledge, encourages a view of humans as active and self-creating (Guba and Lincoln, 1994) and are radically different from other things in the natural world.

The critical paradigm supports a similar paradigm but presents humans as oppressed and in need of liberation. This is thought to reside in critical self-reflection and in highly practical research methodologies. Postmodernism views social reality as an abstraction that is neither visible or countable and that is defined by, and embodied in, discourses (Foucault, 1990). Consequently, reality exists as a text that can be studied, and because it is socially constructed, changed.

3. 6 Rationale for Selection of a Multi-dimensional Research Perspective

The development of an appropriate research perspective provided a challenge for this study. In the balance, it was decided to adopt a multi-dimensional

approach that utilises both qualitative and quantitative methods. Limitations of prior research on teacher burnout and organisational stressors indicated that no one methodology is sufficiently inclusive and that all of the main research perspectives presented above have contributed and informed the knowledge base in the stress/burnout arena. Table 3.0 shows the main research perspectives and how they have informed previous research in the teacher stress/burnout arena. This shows how each perspective helped shape the present study in terms of data gathering, research implications and associated questions.

As can be seen in Table 3.0, each respective paradigm and its data gathering methods has contributed to our understanding and explanation of teacher burnout, and has also provided pointers or areas where further research is needed. This complementary position refutes Lincoln and Guba's (1985) incommensurability argument that there can be no accommodation between the paradigms. It can also be seen that future paradigms need to be not only tolerant of different methodologies but also have a mutual support for each other. Thus, as Brown (1995) stated in his thesis on computers, 'the premise is that no one approach to the study of computers in education is an end in itself, each approach enriches the other' (p.62). The same may be said for this research. The author is not suggesting that the paradigms combine, rather that this research be conducted within a multi-dimensional paradigm. This provides a dynamic approach where each perspective is valued for the understanding that it contributes to mapping the complexity of interactions that contribute to stress and burnout within educational organisations.

Using this approach, what became important in this debate was what we wanted to find out and the problems we defined. The questions we needed to ask determined the methodology, not the other way around.

Table 3. 0 Main Research Perspectives That Have Informed This Research

Philosophical Framework	Main Characteristics Key Values Promoted	Approaches to Data Gathering	Research Implications	Associated Research Questions
Positivism/ Empiricism	based on quantitative data & objective measurement. Theoretical causal knowledge	quantitative, Experiments, burnout inventories, stress causal modelling	Study NZ teachers perceptions of stress compared with stress reported by overseas teachers. Study levels of stress survey coping strategies	What is the level of stress amongst NZ teachers compared with overseas teachers?
Interpretive	Pluralism/ understanding diversity, solidarity, ethnographic,whole environment	Qualitative, case studies, interviews, observations, document review	What do teachers mean when they identify work related factors as sources of stress	How do teachers see and understand stress?
Critical	Emancipation/ empowerment, social change	Participatory, various structured & unstructured quant and qual designs & methods, historical analysis, social criticism	How are the education reforms impacting on teachers. Is the process of change causing increased workloads and overall stress	In what ways are the school organisation serving to maintain power & resources & inequity in schools – how does this relate to teacher stress?
Post modernist	Critical of process, deconstruction of text	Thick description, interviews, self reflection, observation, survey, journal/ diaries	How do teachers view themselves in the stress process	What are teachers attitudes to teacher stress, how have their lives been dominated by the school organisation?

Brown (1995) says we need to think of research paradigms and their underpinning ontological, epistemological and methodological assumptions as open texts. In other words research paradigms are not a fixed set of beliefs to which one must adhere, but evidence of the intellectual struggle with questions that can never be fully resolved. It is not surprising that different theoretical perspectives contain contradictions as this has been seen in many theories and research encounters. For this reason this study uses a multi-dimensional paradigm which is guided by general principles, rather than any type of fixed paradigm.

Soltis (1984) also argues for a comprehensive concept of educational research requiring not only tolerance but mutual support, understanding, conversation and rational critique amongst educational researchers and across traditions. Guided by these values, he argues that good social theory must be at the same time empirical (i.e. objective), interpretive (i.e. deal with human intersubjective and subjective meaning) and normative-critical (i.e. bring ideologies to conscious awareness and make action-value decisions).

There are also obvious advantages when using a multiple methods approach. It is likely to make for a more balanced and thorough study and the use of triangulation aids as a check on reliability and theory confirmation through convergent evidence. This approach is likely to be more holistic in the sense that the data interpretation and analysis are conducted within the context of the whole. This includes describing, explaining, interpreting and understanding the total combination of aspects that are being looked at.

Having established that the rationale for the multidimensional research perspective research methodology adopted in this study, it is important that there be a number of general principles that guide it. The main principle was to make the research relevant to the improvement of conditions for the teachers in schools. The design of this research was founded on and guided by the following general principles which are derived from the paradigm debate.

3. 7 Guiding Principles for Research

1) Focus on the problem of examining the sources of organisational stress and burnout in the school workplace.

2) Include contextual factors in the research design such as changes in educational administration, demographic variables, organisationl factors, and school environment.

3) Ensure that prior theoretical assumptions are made explicit and that every opportunity is given to build new as well as critique existing theories.

4) Explain and clearly justify the decisions throughout the research process so that these are easily open to scrutiny and/or replication.

5) Over the three phases of the research, utilise both qualitative and quantitative research techniques so that a range of data can be obtained from as many sources as possible.

6) Allow sufficient time for the study of significant effects so that observations and measurements do not pertain simply to novel experiences, but more durable and lasting changes over time.

7) Involve participants as much as possible in the research process. Their concerns and perspectives will ultimately judge the value of the research and its applicability to their field of study.

8) Exercise caution in generalising findings from one study to the next. There are so many approaches and differences in settings that situational factors may inhibit the transfer of results from one setting to another.

(Adapted from Brown, (1996) and Lincoln and Guba's (1985) concept of what constitutes trustworthy research).

Having established the research perspective and methodology in this study, the following section explains how a conceptual framework is needed to provide a firm basis for the research design, and how this research on teacher burnout was built on a 'transactional stress' model. This model was refined into one which was specific to teacher stress and burnout and thus useful to this research.

3. 8 Research Design and Aims of the Study

This research set out to investigate stress and burnout within school environments in the 1990's in New Zealand following the implementation of major educational reforms. The research was designed to achieve the specific objectives of the study within a multi-dimensional paradigm which involved both quantitative and qualitative methods of data collection. The study consisted of three phases, each building upon the other.

Phase One, a preliminary study, sought to identify the levels of stress experienced by teachers who were obliged to cope with changing educational demands made on them. This first phase of the study involved a survey method using a questionnaire to gather information on sources of stress and coping strategies adopted by teachers in primary, intermediate and secondary schools in Hamilton. Findings from Phase One are described in detail in chapter four.

Phase Two was carried out to investigate whether teachers were experiencing the more extreme form of stress, burnout. This involved a survey which included demographic and occupational background questions and twenty-two questions from the Maslach Burnout Inventory which was used to measure burnout. Teachers were surveyed in 53 primary schools in the North Shore zoning of Auckland using the Maslach Burnout Inventory. Findings from Phase Two are described in detail in chapter five.

Phase Three included an in-depth investigation of four primary schools from the findings of Phase Two. This phase study looked at aspects of the school environment and how they contributed to high and low burnout as experienced by teachers. It involved a purposive sample of four primary schools using ethnographic techniques. Detailed description of this design and findings are described in chapter six.

The specific aims of the research divided into the three phases include:

Phase One

(1) to explore the current stress levels of urban New Zealand school teachers,

(2) to explore the work situations which are causing the most stress and find out which coping strategies teachers use and which are the most useful.

Phase Two

(3) to confirm the factor structure of the Maslach Burnout Inventory (MBI), and applicability within the New Zealand educational context.

(4) to examine differences in burnout associated with variations in demographic and occupational variables,

(5) to compare levels of burnout experienced by New Zealand primary school teachers with those reported by a normative sample of primary teachers in the United States, where the MBI was developed and validated.

Phase Three

(6) to examine the 'high burnout' schools and identify aspects of the organisation or school work environments that contribute to *high burnout* in primary school teachers,

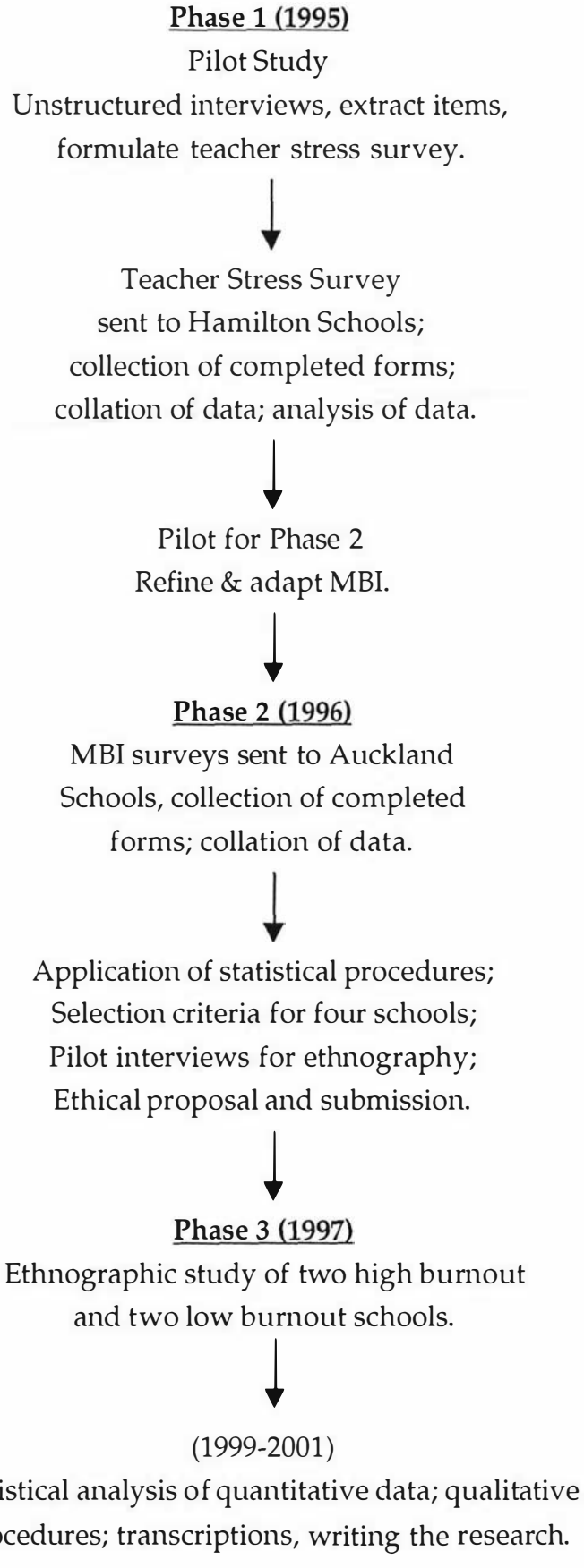
(7) to examine the 'low burnout' schools and identify aspects of the organisation or school work environments that contribute to *low burnout* in primary schools,

(8) to examine differences in the school work environment between the two high burnout schools and the two low burnout schools.

Figure 3.0 provides the outline of the research process and shows the timing sequence for the research. Phase One was a pilot study carried out in 1995 in Hamilton while the researcher was working at Waikato University. Due to job relocations for both the researcher and supervisor, Phase Two and Three were conducted in Auckland during 1996 and 1997. Phase Two included a survey of all primary schools in one large regional area using the Maslach Burnout Inventory. Phase Three involved the in-depth ethnographic study of four primary schools resulting from the Part Two study.

Chapters four (Phase One) five (Phase Two) and six (Phase Three) of this thesis outline each phase's procedures for piloting, carrying out the data collections, analysis of results and discussion of the findings. The information gathering strategies for each phase in the study are directly linked to specific research questions and the techniques used for piloting, collection and analysing data for each phase are documented in the procedure sections of these chapters. Ethical considerations and justifications for decisions made throughout the study are also given attention in these chapters. Chapter six, (Phase Three), gives special attention to the ethnographic techniques adopted in the schools. Advantages and disadvantages commonly associated with ethnography, the schools in the study, maintaining rapport, being an ethnographer and the observer effect are also discussed in chapter in this chapter.

Figure 3. 0 Outline of the Research Process



3. 9 Summary

This chapter introduced and analysed each of the four main research perspectives. This included a description of the the central philosophical traditions that inform, guide and direct educational research. Each perspective has its own distinct elements, strengths and limitations which inform and critically guide methodology. While the perspectives have been open to intense debate, with their conflicting ideals and aims, there are others which have similar features. There has been a tendency to locate educational research in a three-fold classification of positivism, interpretivism and critical theory (Candy, 1989, Soltis, 1984). But as Clark (1997) has stated, the research tapestry is far richer and more varied than that presented by these and similar frameworks. It is also a mistake to see the debate as a crude distinction between qualitative and quantitative methods (Saloman, 1991). The methods used in educational research and social science are now more sophisticated and complex methodologies are often used. Also within each paradigm, there are different intra-paradigm altercations, with their alternative views and philosophies.

Despite previous studies carried out on stress and burnout in the teaching profession, recent changes in educational administration and the increased requirements for accountability have made it timely and increasingly necessary to look at school work environments and identify organisational factors that contribute to the debilitating condition of burnout. While this research used a multi-dimensional perspective utilising both qualitative and quantitative methods, it is submitted that the different methodologies used complemented each other and have enriched the findings that are presented in the final chapters of this thesis.

The next chapter presents an overview of Phase One, the exploratory phase of the study which sought to identify the levels and sources of stress experienced by teachers in the Hamilton region. It includes the aims, procedure, results and findings of this survey.

CHAPTER FOUR

4. 0 Overview of Phase One

Phase One of this research included an exploratory investigation of stress and coping strategies within school environments in the 1990's in New Zealand (1). As mentioned in chapter one, at this time in the history of New Zealand, there were major educational reforms implemented which were presumed to have a strong impact on those carrying out the reforms, teachers. The researcher also was in contact with a number of teachers who described the pressure of extremely high work loads. The additional strain of incorporating new curriculum guidelines with the increased levels of assessment required was placing a lot of additional stress on teachers. Thus, this preliminary study sought to identify the levels and sources of stress experienced by teachers and to identify the coping strategies that they used. As an exploratory study, this phase of the research was expected to uncover some relevant information on teacher stress and burnout. As such it provided the basis for the later phases of the research looking at the more severe consequences of long term stress, burnout.

Hypothesis-setting for this preliminary phase was tentative due to limited information of recent education changes affecting teacher stress. However, as Cox et al, (1988) identified change to be a major factor among current sources of stress for teachers, it was predicted that, in this research, New Zealand teachers would also perceive their levels of work stress as high. Specifically it was predicted that stress levels would not be significantly different between males and females, that beginning teachers, teachers in the oldest age group and principals would show higher stress levels, and that high workload, discipline problems and relationship problems would be major stressors. Lastly it was predicted that there would be a wide range of coping strategies used, with talking to friends and family, watching television and gardening the most frequent.

Phase One was designed to use both quantitative and qualitative techniques of data collection. This involved a survey method using a questionnaire to gather information on teachers' stress. Phase One investigated three aims. These are presented below followed by the research strategies that were used in this first phase.

Note 1: Results from Phase One study have been published in the New Zealand Journal of Education Studies (Whitehead & Ryba, 1995).

4. 1 Research Aims and Strategies for Phase One

Aim 1:

To explore the current stress levels of urban New Zealand school teachers in relation to age, gender, position and years of experience.

Strategies:

Participants were asked to complete an anonymous questionnaire to obtain information on teacher stress.

Participants were asked to rate their current stress in their job using a ten-point Likert type scale in which (1) indicated very low stress and (10) indicated very high stress.

Aim 2:

To explore the work situations causing the most stress and find out which coping strategies teachers used and which were the most useful.

Strategies:

Participants were asked to list situations in their job that made them feel under stress and rank in order the three situations that were the most stressful.

Participants were asked to select from a list (see Appendix 2), the personal strategies used to combat or cope with stress and to note any additional strategies not listed. Participants were also asked to list the three coping strategies that they found most useful.

Aim 3:

To explore teachers' perceptions of stress and the extent to which it affects their job performance and personal life in the new educational era of the 1990's.

Strategies:

Participants were asked for general comments about their perceptions of stress and how it affects their well being.

4. 2 Justification for the Research Design

A multi-dimensional research design adopts a design that is the most suitable in terms of the objective and aims of the study. It is based on a selection of a method, or a combination of methods and research techniques, that can best answer the specific research questions.

The questions in this study required the use of multiple methods in order to examine the full complexity of environmental stress and burnout within which teachers are embedded. Each school has its own culture and organisational climate which impacts on staff and students in different ways. By studying teacher stress and burnout and investigating both high and low burnout school environments, it was possible to gain insight into work conditions that served to lower or maintain appropriate levels of stress and prevent the severe, long term outcome of stress, burnout.

For this reason, as discussed in Chapter three, it was considered important to use both quantitative and qualitative research methods, within a multi-dimensional framework, in order to gain information on the experiences of those teachers in high and low stress school environments. As mentioned previously, research in this area has relied primarily on quantitative methods, thus for the researcher using qualitative as well as quantitative methods there was more holistic and lifelike data which gave the participants opportunities to describe in detail the meaning of work stress from their perspective. The next section presents the methodology for Phase One.

4. 3 Phase One : Methodology

Phase One sought to identify the levels of stress, the sources of stress and the coping strategies adopted by teachers in primary, intermediate and secondary schools in Hamilton. It also sought to find out how the educational reforms had impacted on teachers. The survey method was used for this phase of the research. Before the questionnaire was implemented a pilot study was conducted. The initial data for the pilot study were gathered by unstructured interviews with five teachers available to the researcher. These participants were informed of the research and also asked to make comments on a pilot 'teacher stress questionnaire' regarding its suitability and usefulness. This enabled the researcher to determine whether the survey questions were well constructed, locate errors or ambiguities and determine timing for completion of the questionnaire. In the pilot study panel five participants were also asked to select items from a list of personal strategies used to cope or combat with

stress and to note any additional strategies not listed. From this initial pilot, items were adapted and refined to improve the readability, clarity, and selection of response options. The final version of the *Survey of Teacher Stress* was then prepared for Phase One which was sent to 63 local Hamilton Schools. This phase of the research was authorised by the Department of Education Studies at the University of Waikato, and followed ethical guidelines as required by the university.

4. 3. 1 Procedure

A copy of the '*Survey of Teacher Stress*' was sent to all primary, intermediate, and secondary school principals in the Hamilton area together with a letter detailing the purpose of the study and asking for permission to survey the teachers in the school. Principals were telephoned a week later to arrange strategies for sending out and collecting the questionnaires. Participation in the study was voluntary and the anonymity of individual response was assured. Of the 63 principals contacted, 54 gave permission for the teachers in their schools to participate. Of the 966 questionnaires sent to teachers, 532 (56%) completed and returned the questionnaire.

4. 3. 2 Sample

The sample used for Phase One consisted of 966 teachers and administrative staff from 63 primary, intermediate, and secondary schools in the Hamilton zoned area. A table giving the demographic characteristics of the sample is shown in the results section, table 4.1. There were no specific selection criteria given at this stage of the study (apart from zoning), in an endeavour to make it as inclusive as possible. A response rate of 56%, enabled 532 respondents (from 54 schools) to participate in this phase of the study. This is an unusually high return rate for a postal survey and may reflect the perceived importance/relevance of the topic in the lives of participants.

Demographic Characteristics: Table 4.0 displays the major sample characteristics of the participants. The majority of the sample were females working at the primary school level, and aged between 40 and 49 years of age. Likewise, approximately three-quarters of the sample indicated that they were European. This table also provides a comparison of the number of teachers at each school level, position of responsibility and number of years teaching.

4. 3. 3 Measurement: Teacher Stress Questionnaire

The questionnaire consisted of two sections. Section one comprised background information items including name of school, position in school, gender, ethnicity, age, and number of years teaching. Section two asked teachers to rate their perceptions of stressors in their job and home life, and to indicate the use of specific coping strategies. Teachers were asked to rate their current stress on a ten-point Likert-type scale in which (1) indicated very low stress and (10) indicated very high stress. Participants were then asked to list the situations in their job that they felt contributed to their stress. From this list they were asked to nominate the three highest rated sources of stress in order. They were then asked to select, from a list, the personal coping strategies that they employed and to list any additional strategies not listed. The list of coping strategies was derived from the pilot described above. These nominated items were then grouped together to yield a set of frequently mentioned coping strategies. The most frequent items were used to generate the list of strategies contained in section two of the questionnaire.

Finally, participants were asked to provide open ended comments on how stress had affected their well-being. Open ended comments and responses to questions regarding sources of job stress and strategies used to combat or cope with stress were thematically analysed by the researcher by grouping similar items together (e.g. playing sport and exercise, talking with friends/ family).

4. 4 Results

Means and standard deviations for teachers' ratings of job stress and personal life stress were obtained and cross tabulated according to the background information. This included separate analyses of stress ratings by gender, number of years teaching, age, and position in school. Responses to questions regarding sources of job stress and strategies used to combat or cope with stress were categorised by the researcher for purposes of analysis. All analyses were conducted using the SPSS-x cross tabulation, t-test and analysis of variance programs.

Table 4.0 Demographic Characteristics of Participants (n=532)

Variable	Categories	N	Percent
Gender	Male	167	31.4
	Female	356	66.9
	No Response	9	1.7
Age	20-29 Years	71	13.3
	30-39 Years	135	25.4
	40-49 Years	211	39.7
	50-59 Years	101	19.0
	60+ Years	11	2.1
	No Response	3	.6
Ethnicity	European	398	74.8
	Maori	29	5.5
	Polynesian	5	.9
	Other	14	2.6
	No Response	86	16.2
School	Primary	248	46.6
	Intermediate	166	31.2
	Secondary	112	21.1
	No Response	6	.2
Position in School	Principal	27	5.1
	Deputy Principal	32	6.0
	Assistant Principal	15	2.8
	Scale A teacher	143	26.9
	Position of Responsibility	74	13.9
	Teacher	187	35.2
	Part-Time	24	4.5
	No Response	30	5.6
Number of Years Teaching	0-1 Year	22	4.1
	2-4 Years	54	10.2
	5-9 Years	88	16.5
	10-14 Years	114	21.4
	15-19 Years	100	18.8
	20 + Years	149	28.0
	No Response	5	.9

As there were no specific hypothesis to test concerning demographic characteristics, the demographic data were subject to an exploratory analysis to determine if there were any significant differences on any of the characteristics in relation to perceived level of stress.

Teachers' Perceptions of Job Related Stress and Personal Life Stress:
As Table 4.1 indicates, there were no significant differences between males and females for the rating of current stress in their job. The mean for females were 7.07 compared with 7.10 for males. However, significant gender differences were found for the rating of stress in their personal life (females = 4.81 and males = 4.37; $t = -2.14$, $df = 521$, $p<0.05$.

Number of Years Teaching:
No significant differences were found between the six length of service groups with regard to ratings of stress in their current job. However, as Table 4.1 shows, when the data were recoded to compare teachers with relatively short (0-9 years) versus long service (10-20+ years), a significant difference emerged. The mean ratings for short service versus long services groups were 6.67 and 7.15 respectively ($t = -2.02$, $df = 525$, $p<0.05$). No significant differences were found between the six length of service groups or for the two recoded groups with regard to the effects of stress in their personal lives.

Age of Respondents: No significant differences in stress ratings were found between the five age groups. Likewise, when the data were recoded into two broad age groups (group 1=20-39 years and group 2=40-60+ years), no significant differences were apparent between the groups in terms of job stress (group 1= 6.92 vs. group 2= 7.15; $t=-1.41$, $df = 527$, $p>0.05$) or ratings of the effects of job-related stress on their personal lives (group 1= 4.75 vs. group 2= 4.58; $t = .79$, $df = 527$, $p>0.05$).

Table 4.1 Level of Stress* by Gender, Age and Number of Years Teaching

Analysis	Job Stress Level		Personal Life Stress	
Gender	Males	Females	Males	Females
	7.10	7.07	4.37	4.81
Age	20-39 Years	40-60 Years	20-39 Years	40-60 Years
	6.92	7.15	4.08	4.42
Number of Years teaching	0-9	10-20+	0-9	10-20+
	6.67	7.15	4.60	4.66

* 1= low stress, 10 = high stress

Position in School: Significant differences in mean ratings of job stress were found between the different positions ($F=2.231$; $df= 6,495$, $p<0.05$). Significant differences were also found among the different positions when the effect of job related stress on individual's personal well-being was looked at ($F= 2.309$, $df= 6,495$, $p<0.05$). The mean stress ratings by current position in the school can be seen below in Table 4.2.

Table 4 2 Level of Stress* reported by Position in School

Current Position	Job Stress Level	Personal Life Stress
	Mean	Mean
Principal (n=27)	7.93	4.07
Assistant Principal (n=15)	7.40	5.13
Position of Responsibility (n=74)	7.30	4.12
Teacher (187)	7.03	4.48
Scale A Teacher (143)	7.02	4.01
Deputy Principal (32)	6.84	4.50
Part-Time Teacher (24)	6.25	5.17

* 1= low stress, 10- high stress

Ethnicity: No significant differences were found between the groups for ratings of job stress, stress in personal life, or the effects of job stress on personal well-being.

Perceptions of Job Situations Causing Stress: Frequencies and percentages are presented in Table 4.3. The most frequently mentioned job situations perceived to cause stress were *staff relationship problems* (i.e. interpersonal problems among staff, dissatisfied staff, lack of staff appreciation, lack of support from management), *exams, reports, marking deadlines,* (i.e. deadlines for marking exams, reports and school assignments), *difficult children* (i.e. large numbers, problems with discipline of children, home life problems, children with special needs), *work overload* (i.e. many different roles, too much work required, time pressures), *administration/paperwork,* and *recent changes in education.*

Table 4.3 Frequency of Sources of Job Stress Mentioned

Source of stress	Frequency	Percent
Staff relationship problems	239	44.9
Exams, reports, marking deadlines	227	42.7
Difficult children	226	42.5
Work load	209	39.3
Admin/paperwork	208	39.1
Recent changes in education	199	37.4
Insufficient preparation time	168	31.6
Parental expectations	102	19.2
Extracurricular activities	99	18.6
Too many meetings	88	16.5
High class size	78	14.7
Job uncertainty	36	6.8

Teachers were also asked to list three situations that they considered were *most* stressful. This made it possible to determine which combination of stress producing factors were most frequently mentioned by teachers. From Table 4. 4, it can be seen that *Staff Relationship Problems* is most frequently mentioned in total as the highest cause of stress in teaching followed by *Difficult Children* and *Exams, Reports, Deadlines.* The situation rated first as causing the most stress, was *Difficult Children* followed by*Staff Relationship Problems* and *Work Load.* The

second highest cause of stress most frequently rated was *Staff Relationship Problems* followed by *Difficult Children* and *Exams, Reports, Deadlines.* The third most frequently mentioned causes of stress were *Staff Relationship Problems, Exam Reports and Deadlines,* and *Workload.* The large number of no responses may have been due to teachers having difficulty in rating three situations in the order that they perceived as causing stress.

Table 4. 4 Frequency of Mention (in total) of the Three Highest Rated Sources of Stress

Source of stress	TOTAL
Staff relationship problems	219
Difficult children	177
Exams, reports, deadlines	151
Work load	140
Admin/paperwork	111
Recent changes in education	117
Insufficient preparation time	90
High class size	56
Parental expectations	55
Too many meetings	40
Job uncertainty	29
No Response	353
Total	**1596**

Strategies to Cope With or Combat Stress:

From Table 4.5 it can be seen that talking with friends/family was the most frequently mentioned followed by reading and gardening. From the list of coping strategies used to cope or combat stress, teachers were asked to list in order the three strategies they found most useful. The most frequently mentioned coping strategies in total, as presented in Table 4.5, were talking with friends/family, followed by gardening and playing sport/exercise . The activity rated first as the most useful method for coping or combating stress was talking with friends/family, followed by more passive activities such as reading, gardening and watching television.

Table 4..5 Frequency of Coping Strategies Mentioned

Strategy	Frequency	Percent
Talking with friends/family	347	84.0
Reading	305	57.3
Gardening	300	56.4
Watching TV	283	53.2
Listening to music	278	52.3
Walking/jogging	263	49.4
Eating healthily	239	44.9
Playing sport/exercise	180	33.8
Gym/weights, aerobics	136	25.6
Drinking alcohol	128	24.1
Taking vitamins	97	18.2
Hobby	78	14.7
Meditation	61	11.5
Visualisation	38	7.1
Change of some sort/holiday	32	6.0
Positive thinking/prioritising	31	5.8
Taking medication	30	5.6
Counselling	21	3.9
Sex/massage	16	3.0
Yoga	12	2.3

Comments Regarding Stress, Well-being and Education Reforms

Many of the written comments made by teachers in the survey indicated physical, emotional and psychological problems associated with stress. Teachers discussed health problems such as being unable to sleep, having lack of energy, getting headaches, back problems and sinus related problems such as hayfever, bronchitis and asthma. Often these health problems were accentuated by emotional and psychological factors such as feeling overwhelmed by the workload, having feelings of guilt and resentment at their situation and feeling short-tempered, with the results often affecting family relationships. Generally, teachers considered that stress had a negative effect on their well being. Frequent inner reactions such as "feeling empty", and "less sociable" were mentioned and one teacher stated that she become "introspective and introverted, unable to decide on priorities and to be effective at anything". A common reaction by participants was feeling a lack of confidence in their ability to perform not only in their work, but in everyday life.

Comments regarding the educational reforms and how they impacted on teachers suggested that there was an enormous increase in workload since Tomorrow's Schools. One commented that the number and pace of changes was making teaching very difficult along with lack of training for these changes. Another

commented on increased accountability along with feelings of uncertainty about the future. There were others who discussed the frustrations of education changes and management. Two comments include:

> "Too little value is placed on the welfare of staff and in the present climate of 'management culture' and constant cost-cutting combined with the importance of 'image' in a competitive environment, this (stress) must get worse".

> "It is impossible to implement the new curricula in a school day, week, year. Quality control is needed! Smart curriculum brochures are being produced by subject enthusiasts who do not have to teach all areas, neither do they have to spend their time on courses keeping up to date".

Social issues were also highlighted by at least ten participants who were frustrated at the lack of parenting skills and the blame and pressure that parents place on teachers. Working mothers, in particular, reported feeling guilty and worried about performing all their duties as well as they would like to. For example:

> "I feel guilty, the working wife and mother syndrome. If you are a perfectionist then you always feel as though are never doing either job as well as you could or would like to".

> "I wish I had more time to spend with my own children, when I go home I'm always thinking about what needs to be done before morning class, and it's hard to relax".

Some of the positive comments made by teachers regarding stress and well being were that they enjoyed a certain amount of stress provided that their long term aims were achieved and that they monitored their stress levels and used various strategies to combat them if things got out of hand. For a few teachers stress motivated them to get on with work that needed to be done.

4. 5 Discussion

Teachers in Phase One rated themselves as having high levels of job stress. Findings showed that females reported a significantly higher level of stress in their personal life than males. There may a number of reasons for this. For example, this may be a result of dual role obligations at work and at home. In the open-ended questions, many females, especially single-parent females, stated that they struggled with home duties after working hours and found it difficult to make sufficient time for their children, friends or other family relatives.

Teachers who had been teaching for 10-20 years and those in the 40-60 age group both reported reported significantly higher stress levels in their job than teachers who had been teaching from 0-9 years. This may be due to age concerns, such as having less energy and feeling tired and may also be combined with having more responsibilities

placed on them. Research literature indicates that background variables account for teacher burnout (extreme stress) to a certain extent (Farber, 1983; Friedman and Lotan, 1985). For example Friedman and Lotan found that the level of burnout rises with age and years of experience in teaching until it reaches a peak at the age of 41-45. In the open ended questions, many of the older teachers stated feelings of anxiety over increased work loads, lack of energy and confidence, increased number of physical and mental problems, worry about the future and feelings of being unable to cope.

This phase of the research confirms that teachers do perceive themselves to be under significant levels of stress and that strategies for reducing stress in teaching are needed. A comparison of the staff according to their level of responsibility in the school indicated significant between group differences in job stress and well being. Principals reported having the highest stress in their job followed by assistant principals, position of responsibility teacher, scale A teacher, deputy principal and part-time teacher respectively. A large contributing factor to the high stress levels of principals may be the increased workloads and changing roles resulting from recent administrative changes in the New Zealand education system (Mitchell, McGee, Moltzen and Oliver, 1993). School administrative staff and teachers now have new responsibilities concerned with community consultation, writing charters and policies and developing financial accountability as well as looking after the concerns and stresses of their fellow teachers.

The sources of work which teachers identified as the main sources of stress came under five main categories; staff relationship problems, exams, reports, deadlines, difficult children, work load, and administration/paper work. Since the structural changes and new policy developments of 1989 the demand for change has been rapid and continuous. Raising students' achievement levels and elevating school effectiveness have become pivotal issues in recent years and have led to new responsibilities and an upsurge in the workload for teachers and administrators (Wilson & Otto, 1988). Although the high stress levels reported in this phase cannot be attributed to staff relationship problems alone, many teachers noted that increasing workloads and the demand for 'hard' measurable outputs were having an adverse effect on their well-being. These outputs have included a greater number of meetings (often out of school hours), special in-service sessions, increased amounts of paperwork and evaluation reports and additional professional reading, all of which has made excessive demands on teachers' time and provide more pressure. The stress caused by 'difficult' children is perhaps a feature of teaching which is inherent in the teaching profession. However the economic climate with its reduced financial resources and staffing and closure of schools may be putting extra pressure onto teachers by ensuring high teacher-pupil ratios in many schools. Problems with discipline, students with differing needs and the requirements of having

to consider not only the intellectual development of the student but also the students' social/emotional problems were powerful sources of work stress for teachers and can also be seen as family difficulties bound within community and society.

This first phase of the research shows that teachers were using coping strategies in order to deal with the stress in their life. Although the study was not able to evaluate the effectiveness or actual usage of each coping strategy used, it appeared that the methods used to deal with stress were not, for a significant number of teachers, sufficiently powerful or direct enough to deal with the pressures felt by these individuals. The most common strategies used by the teachers were talking with friends or family, reading, gardening, watching television and exercise /sport. These methods did not appear to be adequate in terms of reducing stress in their job to a significant level or providing the well-being necessary to enjoy day to day existence.

While the results of this phase of the study on teachers' coping strategies are exploratory, they suggest some implications for interventions to improve coping strategies. Shinn, Rosario, Morch and Chesnut (1984), who have researched job stress and burnout in human services, state that little is gained by exhorting individuals to change their ways, as individual coping has little impact on job strain (when the stressors are on the outside), but that agencies should take action to reduce stress and improve supervision of its members. Thus, the researcher considers it vital that attention be given to school-based intervention programs for stress reduction. This may include support groups, physical activity, changes in organisational management, school environmental improvements, educational programs, time management and interpersonal development in an effort to help teachers and administrators deal with the stressors involved in their life.

In the open ended comments of Phase One, a number of suggestions were made with regard to altering or minimising sources of stress. These related to specific areas such as increased workloads due to new reform requirements. Ten teachers commented that more time should be made available to staff to evaluate the problems associated with the new education changes. Also more time allowances (through flexitime arrangements) and adequate resources to carry out effective teaching were mentioned by several teachers who noted that resources were often inadequate, or absent, and directly created a stressful teaching environment. Having supportive, caring staff was seen as essential to many teachers' well-being, as well as the need for more support staff. Fifteen teachers reported the unsympathetic, critical or negative aspects of their fellow workers as well as a lack of team spirit and competitiveness which often added to the teachers' sense of "dis-ease". Findings from this phase suggest that new methods of stress management are

needed. These could include training in time management and human relation skills and discussion or counselling for those with extreme levels of stress. Developing a team spirit in the school and strengthening ties between staff for emotional as well as problem solving support also seems essential in overcoming job stress (Wilson and Otto, 1988). Training and education for the staff which incorporate a holistic approach emphasising the physical, emotional, mental and spiritual parts of the individual will promote a healthier, more integrated staff member and effective teacher.

The message from this first phase of the study is that primary school teachers are indeed under high levels of stress and that education reforms are likely to have accentuated the work load which is likely to have had a corresponding effect on teachers' work environment. Given the widespread attention given to burnout in recent years, along with its severe consequences for individuals, it is therefore important to investigate this severe manifestation of occupational strain, to see if it is affecting teachers. The next chapter, chapter five will discuss the aims and procedure of Phase Two followed by the results and discussion.

CHAPTER FIVE

5. 0 Introduction and Overview of Phase Two

After the completion of Phase One, the researcher relocated to Auckland and after consultation with supervisors it was decided that a fresh urban sample, not affected by the initial phase of the study, be utilised. Phase One was a useful preliminary study which helped develop the aims for Phases Two and Three. The results of Phase One, based on the smaller population of Hamilton, indicated that some teachers in New Zealand were experiencing very high levels of stress and that organisational strategies for reducing this form of stress are needed.

Phase Two of this research investigated the extreme level of stress known as burnout. Recent research has shown that a number of school culture variables are associated with teacher burnout. These include: increased drive towards measurable goal achievement imposed on teachers by school administration; the lack of trust in teachers' professional adequacy; and disagreeable physical environments in which to work (Friedman, 1991). As outlined in chapter one, New Zealand has been through a number of educational reforms over the past decade which have placed increased pressures on schools by requiring them to operate as self-administered organisations working under charter to the Ministry of Education. One effect of this is that school staff have responsibilities for financial and resource management which is held accountable to the Ministry through a stringent evaluation process administered by the Education Review Office (Taskforce to Review Educational Administration, 1988).

Teachers are also required to implement subject area reforms bringing curriculum material to new updated standards. This and stringent student evaluation requirements have taken up a lot of teachers' 'teaching time' and placed pressure on teachers to keep up to date with their teaching objectives. In the context of primary education, another significant contributor to stress and burnout in New Zealand teachers has been the lack of qualified personnel available to teach and this has resulted in increased workloads for primary teachers. Teacher shortage has been the subject of much media debate since the late 1990's and this has added to much internal stress within the profession. During the last five to ten years recruitment efforts have been made to staff

primary school positions from overseas, yet many schools have been unable to find enough teachers to fill existing classroom vacancies. Recent studies of teacher stress literature in New Zealand by Manthei and Gilmore (1994), Whitehead and Ryba (1995) have shown that teacher stress has increased since the 1980's and that teachers report being under increasingly high stress in their job. Results of these studies indicate that a substantial number of New Zealand teachers may well be experiencing 'burnout', the more extreme and intense form of stress, which, apart from having a severe adverse effects on the teachers themselves, will significantly disadvantage students' growth and learning capacity.

Burnout has been defined as a tripartite syndrome comprising emotional exhaustion, depersonalisation, and a reduced sense of accomplishment (Maslach and Jackson, 1981, 1986). Emotional exhaustion, a core component of burnout, is characterised by fatigue and weariness that develop as emotional energies are drained. When these feelings become chronic, teachers find they can no longer give of themselves to students as they once could (Schwab, 1983). As a result, they begin to experience negative feelings and display negative reactions toward their students, a state that Maslach describes as depersonalisation. Teachers may use a number of ways to display indifferent, negative attitudes towards their students such as using derogatory labels (e.g. "they are all idiots"): exhibiting cold or distant attitudes, physically distancing themselves from students (e.g. barricading themselves behind their desk), and "tuning out" from their students through psychological withdrawal (Schwab, 1983). The third component of teacher burnout is a feeling of low personal accomplishment on the job. This may also have a critical impact on teacher behaviours. When teachers feel they are no longer helping students learn and grow there are few alternatives on which they can focus to receive rewards.

The application of the MBI for educational research and evaluation of programmes allows information to be gathered on personal, social and institutional variables that either promote or reduce the occurrence of burnout. Moreover, the MBI lends itself to systematic study of the correlates of burnout. As Maslach (1986) has noted, the relationships between certain demographic variables need to be explored more fully within occupations, in order to provide clues as to what causes burnout and what are its outcomes. With these factors in mind, Phase Two examined specific demographic variables that may be associated with burnout. These variables include gender, age, ethnicity,

teaching level, position, number of years teaching, number of children and access to personal and emotional support networks. It was hypothesised that patterns of burnout amongst teachers and ability to cope with the effects of this would vary to some extent across the demographic variables.

Research evidence indicates that teachers may experience more work-related stress than many other occupational groups (Kyriacou, 1987). This has been borne out by two major studies in Australia and New Zealand which confirmed that teachers experience higher levels of stress than the general population (Dewe, 1986; Kyriacou, 1987). There is a lack of research information however, concerning the relative levels of stress and burnout reported by New Zealand teachers compared with those reported in overseas studies.

Thus, Phase Two was designed to explore substantive issues relating to levels of burnout among New Zealand primary school teachers. The aims of the study were threefold: (1) to confirm the factor structure of the most commonly used measure of burnout, the *Maslach Burnout Inventory* (MBI), in this sample; (2) to examine differences in burnout associated with variations in demographic and occupational variables; and (3) to compare levels of burnout experienced by New Zealand primary teachers with those reported by a normative sample of primary teachers in the United States, where the MBI was developed and validated. Exploration of these issues is essential for: (a) establishing the utility of the MBI as a measure of burnout in New Zealand; and, (b) determining the extent to which New Zealand primary school teachers do, in fact, experience burnout and the factors associated with burnout in this occupational group.

5. 1 Methodology

5. 1. 1 Sample

The participants in Phase Two were 387 teachers and principals from 47 primary schools zoned on the North Shore of Auckland. Demographic characteristics of the sample are shown below in Table 5. 0. This shows the large majority of the sample were female and of European origin. A high percentage of the participants (29.5%) had over 20 years experience teaching and most (63%) were between 30 and 49 years of age. Well over half of the sample were employed in Scale A (basic) teaching positions (61%) and were full time (81%). This table also provides a comparison of the number of teachers at each level of teaching, qualifications of the participants, the number of children

or dependents in their care and the number of emotional support networks they reported as being available to them.

Table 5. 0 Demographic Characteristics of Participants (N=387)

Variable	Categories	Number	Percent
Gender	Male	50	12.9
	Female	336	86.8
Age	20-29 Years	56	14.5
	30-39 Years	107	27.6
	40-49 Years	134	34.6
	50-59 Years	81	20.9
	60+ Years	7	1.8
Ethnicity	European	373	96.4
	Maori/Polynesian	13	4
	Other		
No of Years Teaching in All Schools	0-4 Years	61	15.8
	5-14 Years	164	42.5
	15-20+	161	41.7
Position	Administration	83	21.5
	Teachers	244	63.2
	Ancillary (Relieving/aide)	25	6.4
Teaching Level	Year 1-3	176	45.6
	Year 4-6	162	42.0
	Reading Recovery/ Special Needs	16	4.1
No of Children/ Dependants in Your Care	None	180	46.6
	One	49	12.7
	Two or more	157	40.8
Emotional Support Networks	Few	55	14.5
	Many	329	85.5

Note: Sample sizes vary due to missing data

5. 1. 2 Measurement

The MBI is a well known standardised inventory designed to assess three aspects of the burnout syndrome: emotional exhaustion, depersonalisation and lack of personal accomplishment. The MBI three factor structure was determined through an exploratory factor analysis of the 22 items reported in

the MBI Manual (Maslach and Jackson, 1986). This factor analysis was based on the combined normative samples (N=1, 025) using principal factoring with iteration plus orthogonal rotation. The three-factor solution has been replicated in several follow-up studies with samples of 469 teachers (Iwanicki and Schwab, 1981), 710 teachers (Belcastro, Gold and Hayes, 1983), and 215 psychologists (Aronin and Kubelun, 1981). More recent research by Kalliath, Gillespie, O'Driscoll and Bluehorn (2000), using structural equation modelling with LISREAL, indicates that emotional exhaustion is the most robust of the MBI's three factors, followed by depersonalisation, while the personal accomplishment factor performed weakly. Kalliath and colleagues tested a new model consisting of a reduced number of items from the emotional exhaustion and depersonalisation dimensions. This new measurement model was developed with a sample of 197 nurses, and provided a good fit to the data. Given these contrasting results, it was considered important for this part of the study (Phase Two), to re-examine the factor structure of the MBI.

The first section of the questionnaire consisted of demographic and occupational background questions, as depicted in Table 5.0 above. The second section of the questionnaire contained the Maslach Burnout Inventory (Form Ed, Second Edition), which consists of 22 items assessing three components of the burnout syndrome (Maslach and Jackson, 1993): 1) emotional exhaustion (feelings of being emotionally overextended and exhausted by one's work) - 9 items; 2) depersonalisation (negative, cynical attitudes toward the recipient of one's services, in this case students) - 5 items; and 3) lack of personal accomplishment (negative evaluation of one's performance and achievement in the job) - 8 items. Teachers responded to each item on a frequency continuum ranging from 0-6, with higher scores indicating greater frequency of occurrence of the particular experience. Item scores for each subscale were summed to generate scale scores for the three components. Reliability and validity data for the second edition of the MBI Form Ed have been reported in Maslach and Jackson (1993). Iwaniki and Schwab (1981) obtained Cronbach alpha coefficients of .90 for emotional exhaustion (EE), .76 for depersonalisation (DP) and .76 for (lack of) personal accomplishment (PA), while Gold (1985) reported very similar estimates of .88 (EE), .74 (DP) and .72 (PA).

As the Maslach Burnout Inventory is a widely used, standardised survey with substantiated validity and reliability estimates the MBI was not piloted. However the MBI (Form Ed, Second Edition), developed by Maslach and

Jackson (1993) was used which varied in that some words have been modified to relate to teachers. The MBI Educator's Demographic Data Sheet was designed to collect background information and was adapted by the researcher to include questions suitable for the New Zealand population (see Appendix 3).

5. 1. 3 Procedure

All primary school principals in the North Shore and Hibiscus Coast zoning of Auckland were phoned and given information about the study and permission was requested for the researcher to recruit volunteers for the survey. Principals whose permission was obtained (N=53) were sent copies of the survey to distribute to teachers in the schools. Participants were advised in a covering letter that the survey was designed to gather information about teachers' perceptions of working conditions and personal adjustment (see Appendix 3). Post paid envelopes were provided to ensure confidentiality and, to maintain anonymity, teachers were not asked to identify themselves on the survey form. Completed surveys were received from 47 of the 53 schools who had agreed to participate. The procedure for conducting this study was formally approved by the Massey University Human Ethics Committee.

The first section of the survey was an information sheet explaining the study (see Appendix 3) and was followed by Section one which consisted of 13 demographic and occupational background questions including age, gender, ethnicity, level of teaching, part, full time or relieving work, number of years teaching in the present school and all schools, qualifications number of children or dependants and ratings of personal or emotional support networks. This section was adapted to suit the New Zealand context and included questions about support networks.

The second section of the survey was titled 'Educators Survey' which included 22 questions from the MBI (Form Ed, Second Edition). This was used to measure perceived burnout assessed by the three subscales EE, DP and PA. Responses to the MBI, sections one and two, were categorised and collated by the researcher for purposes of analysis and analysed using procedures from the SPSS package.

5. 2 Results

Factor Structure of the MBI:

The responses of the New Zealand primary school teachers (N=387) were factor analysed in order to study the factor structure of the MBI. For this purpose, it was decided to do an exploratory analysis to compare the results with those reported in the MBI Manual (Maslach & Jackson, 1993). Given that there were significant correlations between the factors, it was decided to derive an oblique three-factor solution using the maximum likelihood method (see Table 5.1). The factor intercorrelations for the New Zealand sample are consistent with the intercorrelations between MBI scales reported in the Manual. It was also found, however, that there was an overlap between EE and DP items. This overlap has also been reported in other investigations of the MBI factor structure (Kalliath, Gillespie, O'Driscoll and Bluehorn, 2000). This appears to reflect the correlation between these two factors (r=.48).

Table 5.1 Factor Correlation Matrix for the Maslach Burnout Inventory

	Factor1 Emotional Exhaustion	Factor2 Personal Accomplishment	Factor 3 Depersonalisation
Factor 1 Emotional Exhaustion	1.00		
Factor 2 Personal Accomplishment	-.18	1.00	
Factor 3 Depersonalisation	.48	-.37	1.00

The 3-factor oblique solution, using the maximum likelihood method, accounted for 51.3 percent of the variance. A chi-square Test of Fit for the 3-factor model was highly significant (Chi-square = 460.42, $p<.001$). The NZ factor solution was compared with the US Factor structure reported for the MBI normative data (Maslach & Jackson, 1993). This comparison of item factor loadings for the MBI is displayed in Table 5.2. For the purpose of this analysis, factor loadings equal to or greater than .40 on the rotated factor structure were interpreted as significant. An examination of the highest loadings of these two

factors indicates that, with the exceptions of items 6 and 16, the loadings identified a set of items as EE on factor 1 and DP on factor 2. One explanation for the loading of EE items on the DP Factor is that a relationship exists between perceptions of burnout (EE) and a sense of not caring about others (DP). Despite the overlap on these two factors, the DP and PA scales are highly consistent with the US results.

The NZ factor structure confirms the presence of three principal components corresponding to the tri-dimensional structure of the MBI. The eigen values in Table 5.2 show that the three factors with eigen values greater than 1.00 thus account for more than 50 percent of the common variance. The scree test in Figure 5.0 also shows that the eigen values for the first three factors before the 'elbow bend' cover a majority of the cummulative variance before the plot splays out. Thus, given the small amount of variance explained by the remaining factors, it was decided to retain the three factor structure.

Table 5.2 Item Factor Loadings for the Maslach Burnout Inventory: Comparison of NZ and US Factor Structures Oblique Maximum Likelihood Solution

Item		Factor 1 Emotional Exhaust.ion		Factor 2 Depersonal-isation		Factor 3 Personal Accomplishmem t	
		USA	NZ	USA	NZ	US	NZ
1.	I feel emotionally drained from my work.	**.74**	**.84**	.06	**.40**	.02	-.16
2.	I feel used up at the end of the work day.	**.73**	**.85**	.04	.31	.03	-.09
3.	I feel fatigued when I get up in the morning & have to face another day on the job.	**.66**	**.77**	.18	**.41**	.15	-.21
6.	Working with people all day is really a strain for me.	**.61**	**.56**	.22	**.56**	-.10	-.22
8.	I feel burned out from my work.	**.84**	**.81**	.19	**.52**	-.09	-.25
13.	I feel frustrated by my job.	**.65**	**.65**	.23	**.45**	-.12	-.17
14.	I feel I'm working too hard on my job.	**.56**	**.51**	.08	.31	.07	-.05
16.	Working with people directly puts too much stress on me.	**.54**	**.47**	.31	**.55**	-.06	-.24
20.	I feel like I'm at the end of my rope.	**.65**	**.69**	.21	**.55**	-.08	-.29
I. Depersonalization							
5.1	I feel I treat some students as if they were impersonal objects.	.11	.33	**.67**	**.63**	-.09	-.27
10.	I've become more callous toward people since I took this job.	.23	.38	**.66**	**.76**	-.13	-.23
11.	I worry this job is hardening me emotionally.	.37	**.41**	**.55**	**.77**	-.10	-.30
15.	I don't care what happens to some students.	.12	.26	**.62**	**.54**	-.16	-.23
22.	I feel students blame me for some of their problems.	.13	.28	**.41**	**.54**	-.04	-.22
III. Personal Accomplishment							
4.	I can easily understand how may students feel about things.	.11	.00	-.06	-27	**.50**	**.42**
7.	I deal very effectively with the problems of my students.	-.01	-.07	-.07	-.25	**.54**	**.63**
9.	I feel I'm positively influencing other people's lives through my work.	-.02	-.03	-.17	-.20	**.58**	**.62**
12.	I feel very energetic.	-.30	**-.44**	-.04	-.28	**.43**	**.55**
17.	I can easily create a relaxed atmosphere with my students.	-.06	-.18	-.08	-.30	**.51**	**.58**
18.	I feel exhilarated after working closely with my students.	.00	-.21	-.23	-.23	**.55**	**.60**
19.	I have accomplished many worthwhile things in this job.	-.10	-.19	-.17	-.33	**.57**	**.64**
21.	In my work, I deal with emotional problems very calmly.	-.07	-.03	.07	-.33	**.59**	**.40**
Eigenvalues		6.90		2.71		1.67	
Percentage of Variance		31.36		12.31		7.59	
Cumulative Percentage of Variance		31.36		43.67		51.26	

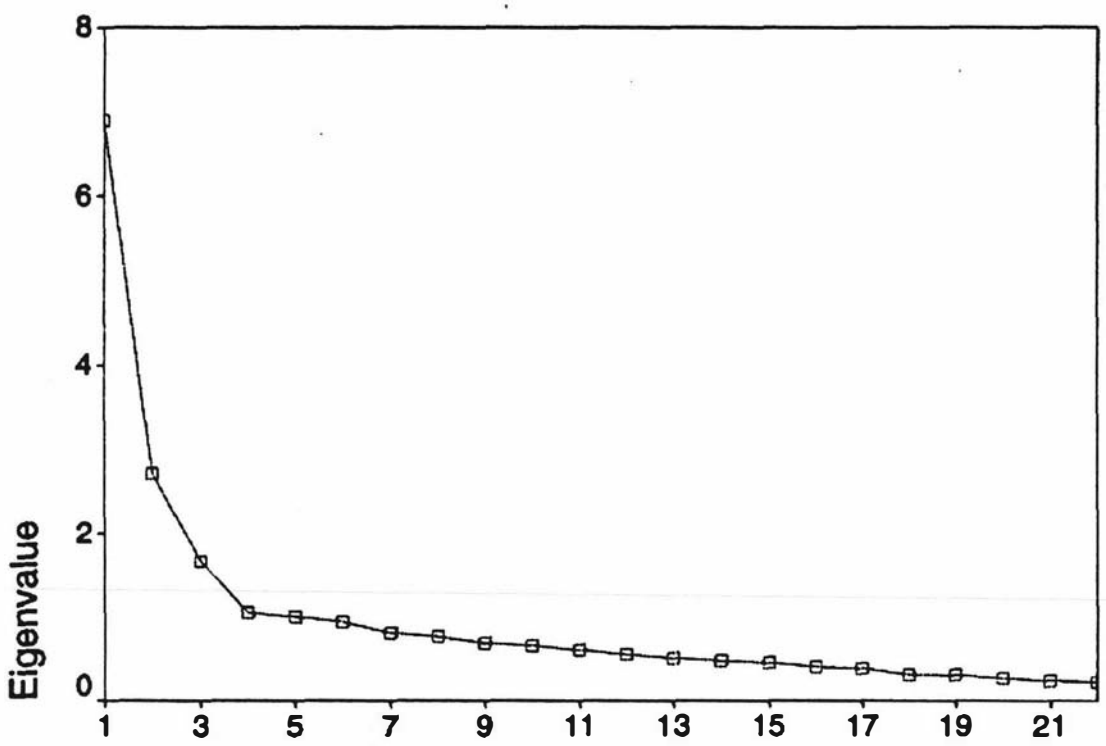


Figure 5.0 Scree Plot

Factor 1 consisted of the emotional exhaustion items in both the US and New Zealand factor structures, accounting for 31.4% of the variance (NZ solution). This confirms that the EE sub-scale is by far the dominant dimension of the MBI. The nine items in the emotional exhaustion subscale described feelings of being emotionally overextended and exhausted by one's work. For this factor, the item with the highest factor loading, " I feel used up at the end of the day" (.85), reflects a high degree of burnout. All items of the emotional exhaustion subscale loaded on this factor.

Factor 2 showed consistent loadings for depersonalisation items on both the US and NZ structures. The five items in the depersonalisation subscale described an unfeeling and impersonal response towards students in the teacher's care or service. For this factor, the two items with the highest loadings, "I worry that this job is hardening me emotionally (.77), and, "I've become more callous toward people since I took this job" (.76), reflect emotional isolation and negative attitudes toward others. All 5 items of the depersonalisation subscale loaded on this factor.

Factor 3 is defined by the personal accomplishment items of the MBI, found to be consistent for both the US and NZ data. The item with the highest loading on this factor, "I have accomplished many worthwhile things in this job" (.64), is clearly concerned with a sense of achievement in working with others. Six out of the eight items comprising the subscale of personal accomplishment loaded on Factor 3. These describe feelings of competence and successful achievement in the teacher's work with others.

Given the moderate intercorrelation between EE and DP, it is not possible to accept that there is a clear-cut distinction between these two dimensions. Clearly, both of these scales refer to negative energy or intolerance for others. In contrast the personal accomplishment scale denotes items in the positive direction of feelings and relationships with others.

Within Sample Comparisons of EE, PA, and DP Scores:
The category means for each independent demographic variable were compared to determine if there were significant differences in terms of the three factors of the MBI (see Table 5.3). This was followed by a Scheffe Post Hoc Comparison test to identify which group or groups were significantly different from one another (Scheffe, 1953). The bold type denotes means that were found to be significantly different at the .05 level using the Scheffe Post Hoc Comparison test. A check was also carried out to determine if there were any differences in MBI ratings due to school decile level (1-10). (School decile levels of 5-10 indicate that the schools are in affluent areas and receive little government funding. Levels 0-5 indicate less affluent areas and schools would receive considerable levels of government funding). ANOVA results confirmed that there were no significant differences between the school decile groups for the three MBI factors.

Comparisons of emotional exhaustion (EE) indicate significant mean differences for age group, position, teaching level, and ratings of emotional support networks (Table 5.4). The picture that emerges is that staff in the 30-39 age group have significantly higher EE scores compared with older staff (Scheffe Comparison, $p<.05$). Likewise, there was a significant difference between the mean EE scores for 'number of years teaching experience'. Staff with relatively fewer years of experience (14 years or less) tended to record higher EE scores than their longer-serving peers. Teaching staff recorded significantly higher levels of EE in comparison to administrators and ancillary staff (relieving and teacher aides).

Year 4-6 teachers recorded the highest mean score (Scheffe Comparison, $p<.05$) followed by year 1-3 teachers and special education teachers respectively. Staff reporting the presence of "many" support networks reported lower EE scores than colleagues reporting "few" support networks.

For the personal accomplishment (PA) scale, significant mean differences were found for position, teaching level and emotional support networks (all $p<.01$). This shows that teachers, in comparison to administrative and ancillary staff, tended to record the lowest mean PA scores. Apparently, there is an inverse relationship between EE and PA such that teachers recording higher levels of emotional exhaustion, also rate themselves as having a lower level of personal accomplishment. The mean for PA was highest amongst year 1-3 teachers compared with reading recovery, special education and year 4-6 teachers (Scheffe Comparison, $P<.05$). The PA mean was significantly higher for individuals who rated themselves as having few social networks compared with those who indicated that they had many sources of support.

The depersonalisation (DP) scales scores reflect a similar pattern to the PA comparisons. This is evident in comparisons showing that teachers recorded higher DP scores on average than administrators or ancillary staff (Scheffe Comparison, $p<.05$). Also, there was a significant difference between the means for teaching level, although the post hoc comparison showed there were no differences between any two groups. Special needs staff and year 1-3 teachers recorded lower DP scores relative to year 4-6 teachers. The mean DP score for staff who rated themselves as having few emotional support networks was significantly higher than for those recording many support networks. A significant gender difference was found for DP indicating that males on average record much higher levels of depersonalisation than their female counterparts. Maori/Polynesian and other teachers recorded significantly higher DP scores than their European counterparts. It may be however that the small sample size ($N=13$) is unrepresentative and so caution needs to be exercised in interpreting this result.

Table 5.3 **Analysis of Emotional Exhaustion, Personal Accomplishment and Depersonalisation Subscale Scores**

Variable	Categories	EE Mean	EE S.D.	EE *F*	PA Mean	PA S.D.	PA *F*	DP Mean	DP S.D.	DP *F*
Gender	Male	27.89	9.29	.18	36.23	7.21	.62	8.22	5.76	6.66**
	Female	27.22	10.69		37.26	5.85		6.02	5.60	
Age	20-29	28.50	9.60	3.26**	37.98	6.69	.78	7.14	6.23	2.41
	30-39	**28.85**	10.63		36.80	5.46		6.73	5.94	
	0-49	27.51	10.45		37.35	5.41		6.51	5.58	
	50+	24.43	10.51		36.54	7.22		4.91	4.90	
Ethnicity	European	27.20	10.51	.67	37.14	6.05	.79	6.19	5.62	-2.20**
	Maori/Polynesian	29.31	11.06		36.69	5.91		9.69	6.12	
	Other									
No. of Years Teaching	0-4	**27.66**	10.22	4.40**	37.51	5.98	3.46*	6.53	**6.15**	4.39**
	5-14	22.82	10.41		35.16	4.89		3.79	5.93	
	15-20+	**29.34**	12.32		35.71	7.28		7.09	5.18	
Position	Administration	25.50	8.84	6.50**	38.41	5.69	4.29**	6.05	4.62	3.34*
	Teachers	**28.34**	10.86		36.57	6.13		**6.63**	5.98	
	Ancillary	21.40	9.10		39.08	5.18		3.64	4.48	
Teaching Level	Year 1-3	26.96	11.29	3.86*	**38.04**	5.86	4.47**	5.48	5.38	6.06**
	Year -6	**28.68**	9.94		36.133	6.07		**7.42**	6.07	
	Reading Recovery	22.36	7.89		6.09	6.21		4.50	4.10	
	Special Needs									
No. of Children/ Dependents	None	26.26	10.45	1.53	37.24	6.01	.28	6.18	5.50	2.56
	One	29.29	10.12		36.50	6.88		8.00	6.99	
	Two or more	27.68	10.68		37.19	5.83		5.92	5.34	
Emotional Support Networks	Few	31.12	10.18	8.41**	35.49	6.70	4.77*	8.71	6.52	12.21**
	Many	26.67	10.45		37.41	5.88		5.89	5.41	

Note: * p<.05, ** p<.01
Bold type denotes group means that are significantly different from others using Scheffe Post Hoc Comparison

In summary, these analyses indicate that teachers in the upper primary school level (year 4-6), and staff in the 30-39 year old age range reported the highest level of emotional exhaustion (EE). The mean for personal accomplishment (PA) was highest amongst year 1-3 teachers compared with year 4-6 and special education staff. Male respondents and teachers in the 4-6 year range recorded the highest levels of depersonalisation (DP) compared with their peers.

Between Sample Comparisons of US and NZ teachers :

Table 5.4 shows the means, standard deviations, t values, probability, and alpha reliability coefficients for each of the three subscales of the Maslach Burnout Inventory. This compares Auckland New Zealand primary teachers (N=384) with the normative data for US teachers (N= 4,163) reported in the MBI Manual (Maslach & Jackson, 1993). As can be seen, the alpha reliability coefficients for the New Zealand data are nearly identical to those reported for the US normative data (EE=.90, PA= .79, DP=.77) (Iwanicki & Schwab, 1981). New Zealand teachers recorded a significantly higher mean score on the emotional exhaustion scale (27.35) compared with their United States counterparts (21.25). In contrast, the depersonalisation mean score for New Zealand teachers is significantly lower than for the US sample. Likewise, New Zealand teachers reported a higher mean score on the personal accomplishment scale compared

with the US sample. It is interesting to observe that, despite overall high levels of emotional exhaustion compared with the US teachers, New Zealand teachers report higher sense of personal accomplishment scores concerning their professional work. Care needs to be exercised however in making direct comparisons as no information is presented in the MBI manual on the characteristics of the American sample.

Table 5.4 Comparison of NZ and US Normative Data

Variable	Mean	SD	t -Value	Variable	Alpha Coeffi
EE (NZ) EE (US)	27.31 21.25	10.52 11.01	10.73 ***	EE (NZ) EE (US)	.90 .90*
DP (NZ) DP (US)	6.31 11.00	5.66 6.19	15.08 ***	DP (NZ) DP (US)	.79 .76*
PA (NZ) PA (US)	37.12 33.54	6.04 6.89	11.33 ***	PA (NZ) PA (US)	.77 .76*

Note: alpha coefficients reported by Iwanicki & Schwab (1981)

***P<.001

5. 3 Discussion

This section of the study extended the findings of Phase One, by examining teacher stress and burnout in relation to demographic and personal characteristics and verifying the factor structure of the MBI based on a comparison of New Zealand teachers and United States teachers and other occupational groups. The results indicate that New Zealand teachers recorded significantly higher levels of emotional exhaustion in their workplace compared with their United States counterparts. It needs to be recognised however that the US normative data were collected in the 1980's and hence differences between New Zealand and United States teachers may reflect the different points in time at which these two sets of data were gathered. In order to verify these differences, it would be necessary to carry out another between-country comparison using a more contemporary US sample that has equivalent characteristics to the New Zealand sample.

Several reasons may be proposed for the high levels of emotional exhaustion reported by New Zealand teachers. In previous studies high workload has been identified as the main contributor to stress and burnout amongst New

Zealand teachers (Whitehead and Ryba, 1995, Dewe, 1968, Manthei and Solman, 1988). Also, at the time this research was being carried out, there was a general shortage of teachers in New Zealand schools and this may have increased pressure on existing staff. The high ratings of emotional exhaustion in New Zealand teachers could also be due, in part, to the excessive curriculum demands placed on New Zealand teachers who are required to teach many specialist subjects such as music, Maori language, sport/fitness and art, in addition to the core learning areas.

Recent educational reforms that began with the Picot Report (Taskforce to Review Education Administration, 1988) have placed increased pressure on schools to take governance responsibilities for all aspects of education under contract to the Ministry of Education. The learning institution is the basic 'building block' of educational administration, responsible for determining how its educational resources are used, within overall guidelines set by the Ministry. No intermediate bodies exist between the Ministry of Education and the individual learning institution. Pressure is exerted on all fronts by the requirements for schools to set their own objectives, in recognition of community needs, and to be accountable through regular 'assurance audits' carried out by the Education Review Office. These audits are intended to verify that the school is conforming with statutory requirements and reaching the expected level of student achievement through overall evaluation of academic performance data.

Another factor that may contribute to stress and burnout amongst teachers is the fast tracking of subject areas reforms that have taken place since the adoption of the New Zealand Curriculum Framework (Ministry of Education, 1993). This was informally cited by teachers participating in this research as a very stressful process that required them to work overtime in order to keep up with assessment and documentation demands. As well as extracurricular activities such as weekend sports, choir and drama events, teachers in New Zealand are also expected to take on a pastoral role supporting students' personal needs. Most New Zealand primary schools do not have counsellors in the school and thus their role extends to include psychological helper and provider of specialised programmes for children with special needs. This dual role as teacher and support person may contribute to teachers' feelings of emotional exhaustion and alienation or distancing from their students. This is especially evident with male teachers who recorded a significantly higher mean score on the depersonalisation subscale compared with female teachers. This

gender difference is consistent with previous research by Maslach and Jackson (1985).

Comparison of mean ratings for emotional exhaustion reveals that the 30-39 age group of teachers recorded higher EE scores than the older age groups. An explanation for this may be that, in addition to learning and consolidating skills necessary for their position, this mid career group are at the career-achieving stage, working toward promotions and trying to move up the pay scale. Inevitably the need to perform and achieve tangible results can increase stress loadings on teachers. On the other hand, older teachers who have remained in the system are likely to have adapted to the requirements and learnt the necessary coping mechanisms in order to function effectively. This is also evident in the lower mean scores for depersonalisation (DP) recorded by older respondents.

Other groups which revealed slightly higher EE means were Maori/Polynesian teachers and other teaching staff who are not working in administration or ancillary positions. It is well known among the New Zealand teaching profession that Maori teachers are under considerable pressure, not just because there are so few of them, but because of the increasing need to accommodate new curriculum demands. These teachers, as well as providing leadership in all areas of Maori culture, are expected to cater to all things Maori, i.e. resources, culture, music, art and sport, as well as supporting the needs of non Maori teachers who require assistance with their own programmes. These requirements are very likely to cause extreme exhaustion and job dissatisfaction and lead to high staff turnover.

Teachers in general had significantly higher EE scores than either administration or ancillary staff. This may simply reflect the fact that they are the ones spending the most time in face to face contact with students dealing with education and behaviour problems and meeting the individual needs of all students with a wide range of abilities and temperaments. There is a need however for future research to explore the associations between burnout and certain demographic and individual characteristics. There is evidence from previous research to show that burnout is linked to personal expectations (Stevens and O'Neill, 1983) and motivations (Anderson and Iwanicki, 1984). It may be that New Zealand teachers, who record relatively high personal accomplishment scores, also hold high personal expectations for themselves and that this tendency contributes to occupational stress.

In contrast to the United States normative data, New Zealand primary school teachers reported higher scores on the personal accomplishment scale (PA), reflecting the tendency to evaluate themselves positively in their work, accomplishing many worthwhile things and dealing well with students' problems. Reasons for this result are unclear. It may well be that, with recent hard line measures of accountability and goal achievement imposed on teachers, they may be unwilling to admit to problems with their own personal accomplishment. In other words, it may be acceptable to express feelings of stress and exhaustion, but not acceptable to indicate failure to achieve a good standard or accomplish tasks, as this may jeopardise their job situation. Teachers may obviously want to be seen by others as achieving or succeeding with their teaching. An alternative explanation for this result is that, despite rating themselves as having a high level of emotional exhaustion, New Zealand teachers persevere with meeting employment demands and continue to derive satisfaction from their personal accomplishments with students. It is speculated that teachers reporting high levels of stress and burnout may employ coping strategies or have personality attributes that ameliorate their feelings of accomplishment. Whatever the reason, it is clear that the profile of New Zealand teachers is significantly different to that of their US counterparts on these factors. The relationship between relatively high emotional exhaustion and high personal accomplishment needs to be further investigated.

The mean depersonalisation (DP) score for this sample of teachers was significantly lower than US counterparts, reflecting a low degree of burnout. This finding is also at odds with the very high emotional exhaustion scores, but as suggested by Maslach and Jackson (1993), there is limited knowledge about the relationships between the three aspects of burnout and that the scores for each subscale should be considered separately and not combined. While many reasons may be advanced for the inverse relationship between EE and DP, it may be the case that even when teachers are very emotionally exhausted, they do not necessarily respond to their students in a negative or cynical manner or treat them as impersonal objects. As with personal accomplishment (PA) it may that teachers do not (even to themselves) want to be seen as callous and inhuman to others and be very wary of admitting this even in an anonymous situation. In New Zealand, considerable emphasis is placed on the responsibility of teachers for facilitating a caring and supportive relationship with their students. It may be that differences in the perceptions of teachers

concerning their pastoral role may account for the contrast between the US and NZ sample.

In New Zealand, strong emphasis is placed on social responsibility and obligations of schools to the community. The notion of 'in loco parentis' is readily catered to in our New Zealand primary schools and teachers are expected to take on many different roles, educator, socialiser, counsellor, pastor and even mother. This may stand in contrast to the situation overseas where the role of teachers is viewed more as an 'occupation', with fewer social obligations and limited support requirements outside the customary academic role. Thus New Zealand's social and bicultural values may to some extent have influenced the low depersonalisation scores because teachers have it ingrained in their own expectations to possess caring and humane attitudes to their students, regardless of workload.

The message from this second phase of the study is that primary school teachers in New Zealand are under high levels of emotional exhaustion which are apparently higher than their American counterparts. Investigation of these teachers' work environments and finding differences between high and low burnout environments is therefore an important follow on for Phase Three. In keeping with the interactional model it is important to now study the situational contexts of schools. Therefore, this next phase investigated the environmental and organisational factors of four primary schools in order to identify stressors and to suggest strategic changes particularly in light of the education reforms. Chapter six presents the qualitative research for this final stage of the research (Phase Three).

CHAPTER SIX

6.0 Introduction and Overview of Phase Three

This chapter presents the qualitative data for phase three of this research. The completion of Phase Two extended the earlier findings of teacher stress by indicating that New Zealand teachers were recording significantly higher levels of emotional exhaustion than their United States counterparts. The reasons suggested for these findings include the recent education reforms which have increased teachers work loads and required increased administrative and documentation demands; extracurricular demands, for example weekend sport, drama, choir and or special needs requirements, all of which impact on a teacher's working environment.

The findings from Phase Two suggested that many teachers in New Zealand were under high or critical levels of stress in their job. The influence of organisational factors in the development of burnout has suggested that management processes play a vital role in either creating or alleviating burnout among employees. Where staff are involved in decision making related to their job and can determine important work processes, burnout is far less likely to occur (O'Driscoll and Schubert, 1988). On the other hand, inflexible and rigid organisational rules and policies may exacerbate burnout levels (Gaines and Jemier, 1983). Schultz et al. (1995) have observed that, in organisations possessing a 'clan' culture, characterised by teamwork, participation and autonomy, employees displayed less burnout because they functioned in favourable work conditions. Similarly, transformational leadership processes which enhance the development of positive work attitudes by contributing to employee-organisation goal congruence, job clarity and work satisfaction, have all been linked with reduced burnout (Travers and Cooper, 1998).

Research carried out within the organisation of the school has found that certain particular behaviours and demands have been cited as stressors. As previously mentioned in chapter two, these have included role conflict, role overload and role ambiguity. Other organisational factors associated with teaching that have been found to contribute to burnout have included lack of staff and equipment, excessive paperwork, insufficient salary, lack of advancement opportunity and lack of administrative support (Farber, 1982; McGuire, 1979; Sakarov and Farber, 1983).

Phase One of the present research found that many of the above stressors were frequently cited as causing stress in teachers. Other significant contributors to stress included: staff relationship problems, exams, reports and marking deadlines, difficult children, work overload and recent changes in education. It was expected that these stressors and other environmental features would be some of the main contributors to teacher burnout in Phase Three. Dunham (1998), in the preface of his book 'Stress in Teachers', highlighted the alarming low levels of job satisfaction in teaching and indicated that, in the United Kingdom, turnover intentions were on the increase, with a survey of 361,000 teachers showing that 46,950 teachers in any one year are changing jobs. Dunham (1998) also discussed the danger of focusing stress research on the individual rather than the organisation and share the conclusion that initiatives at the organisational level can reduce some of the causes and costs of teacher stress. Also, as previously mentioned in chapter two, many researchers agree that although a person's characteristics and personality establish, to a certain degree, the propensity to burn out under certain work conditions, the main cause for the majority of cases of burnout is environmental (Cherniss, 1980; Etzion, Kafri, and Pines, 1982; Farber, 1983; Friedman and Lotan, 1985; Kahn, 1974, Maslach, 1978; Pines and Aronson, 1981; Pines, Kafri, and Etzion, 1980; Shirom, 1987). Cooper et al (2001) also state that the predominant research has been on job-related and organisational factors (the focus of this thesis), particularly as their relationship with burnout may be more directly assessed and because of the more obvious implications for interventions to reduce burnout levels. Therefore, based on the previous findings of phase one and two, where teachers indicated being under significantly high levels of emotional exhaustion, it was thus seen as important in this last phase (Phase Three) to investigate New Zealand schools in an in-depth manner, looking at levels of burnout within the working environment. It was expected that there would be substantial differences between low and high burnout schools, that there would be organisational and environmental features (for example leadership style, support networks, poor lighting and availability of resources amongst others) that would distinguish between these sets of schools.

Specific aims for this phase included: 1. to examine two high burnout schools and identify aspects of the organisation or school work environments that contribute to *high* burnout in primary school teachers; 2. to examine two low

burnout schools and identify aspects of the organisation or school work environments that contribute to *low* burnout in primary schools; and, 3. to examine differences in the school work environment between the two high burnout schools and the two low burnout schools.

The exploration of high and low burnout school environments can be seen as essential for 1. identifying stressors that contribute to burnout within schools and 2. making strategic changes particularly in light of the education reforms. Initiatives at the organisational level are likely to reduce some of the causes and costs of teacher burnout. It was expected that certain aspects of leadership style, lack of substantial support networks and excessive workloads would contribute to higher levels of emotional exhaustion and that the converse of this would contribute to lowered teacher burnout.

Apart from the fact that the amount of qualitative research in which teachers subjectively describe the meaning of work stress is limited (Blase, 1986), the purpose of using qualitative data for this phase was to describe and explain the working world of these primary school teachers as they experienced it. It also allowed the researcher to study the four schools in depth, to share the experiences of the teachers, to understand better why they acted as they did and, as Denscombe, (1998) states, 'to see things as those involved see things' (p.69). Using an ethnographic approach also provided, as stated by Hargreaves (1978), a 'language for speaking about that which is not normally spoken about' (p.19). Using this approach also gave the researcher a unique position to convey literal description that figuratively transports the reader into the situation of teachers, with a sense of insight, understanding and illumination of the facts or the events related to burnout in our New Zealand primary schools.

6. 1 Methodology

6. 1. 1 Procedure

Phase Three involved an ethnographic study of four primary schools, two high burnout schools and two low burnout schools, chosen from the Phase Two results. This qualitative part of the research was carried out over four months with the primary intent of finding and describing differences in the environment between the high burnout and low burnout schools.

With the aid of a Research Advisory Committee, a purposive sampling procedure was used to select four primary schools to be used for the comparison of environments. The selection of four schools was based on the results of the Phase Two MBI emotional exhaustion subscale score means. More detail of this selection is given in section (6.1.4). Four primary school principals in the North Shore zoning of Auckland were sent a letter proposing the ethnographic study and invited them to participate. The letter included an information sheet which explained the purpose of the study, their school's role in the project, timing (i.e. the months involved and length of involvement), consent issues and staff rights which outlined the voluntary nature and confidentiality issues.

The principals were phoned one week later to get confirmation from them that their school would participate in the study. All four principals gave consent. The researcher then visited the four participating schools and gave staff a brief overview of the study. Details such as the time, dates and what would be expected from them were discussed and their questions were answered. Staff were also provided with Information Sheets (see Appendix 2) which gave them an introduction to the project on teacher stress, the purpose of the study, their role in the project, the timing (which stated the length of the project and the days each week that the researcher would be in residence) and a section titled 'Your Rights' which discussed the voluntary nature of the study, confidentiality and other ethical issues. On the last page there was a statement titled 'consent for participation' in which participants were asked to sign to indicate that they wished to participate in the research project. This page also gave staff choices regarding the nature of participation. This included the choice to be acknowledged as a consultant to the research or to remain anonymous (see Appendix 2).

The researcher used multiple methods to collect data during the time spent in each school. These included individual interviews with staff, and observation reports/ field notes of environmental variables, including reports from staff conversations, meetings and school documents. Using multiple methods of data collection served as a means of triangulation to validate responses and observations. Data were collected over a four month period. The four schools were observed over four months, with two schools researched for the first two months and the next two schools for the last two months (see field notes, section 6.1.8). Each school was visited on two days per week. During this

period in the two sets of schools, the time frame for visits was changed weekly to ensure adequate sampling of events that routinely occurred within the organisation, for example staff meetings.

A purposive sampling procedure was used to select individuals for interviews in each school. This meant that interviews were undertaken due to the availability and good will of individuals. Some individuals declined to be interviewed and this was mostly due to time constraints. A total of nineteen staff were interviewed, four from Pink and Green Schools, five from Red School and six from Blue School. This enabled an adequate representation of the four schools and generated an understanding of the schools from a variety of perspectives. Interview participants who elected to participate in the study and gave consent to be interviewed were selected from each school . Individuals were selected for interviews to reflect variance in amount of time associated with the school, expertise, experiential background and age. Before the criteria utilised to select the four schools for Phase Three is given, the piloting procedures used to establish the main study are presented.

6. 1. 2 Piloting for Phase Three

The pilot involved a number of procedures. One school, randomly selected, was used as a pilot for the main study. General observations of the school's environment, discussions with staff and one teacher interview were carried out over a period of three days. Follow up discussions with the deputy principal and the teacher who was interviewed were also held. The piloting for Phase Three was carried out to check the draft interview questions so that participants in the main study would not experience difficulties in completing it and to carry out preliminary analysis to see whether the wording and format of questions would present any difficulties when the main data was analysed. It enabled the researcher to a) determine the time the interview draft took to complete; b) determine whether the sequencing and nature of the questions were appropriate; c) determine whether the questions were likely to draw out teachers perceptions and beliefs and; d) gain experience using audio recording equipment. Consultation with PhD supervisors and research advisory committee (see below) members produced a number of refinements to the interview schedule which resulted in the final interview schedule (see Appendix 4).

Research Advisory Committee

The researcher invited five teaching professionals to join a Research Advisory Committee for this last phase of the research. These individuals had different background experiences and perspectives on education and were also involved in their own postgraduate research. This group acted as advisors providing critical discussion on various issues such as methodology procedures and ethical issues and provided assistance for the sample selection, based on the criteria presented below in section (6.1.4). Included in this group were one primary school principal, one deputy principal, one secondary physical education senior teacher, one university lecturer, and two teachers (one primary and one secondary). The researcher's doctoral supervisors also assisted in the sample selection process for Phase Three.

6. 1. 3 The Schools in the Study

Four primary schools participated in Phase Three. All four schools were located in the North Shore zoning of Auckland in middle class residential suburbs, and had similar high decile ratings (all were 9 or 10). Each school was co-educational having similar numbers of children attending. All four schools were state operated, providing primary education training for children from the age of five (Year 1) through to the age of eleven (Year 6). Although more detail of each school is given in (6.2.1), Table 6.0 gives some of the main characteristics for the four schools. These include: status (being either high or low burnout), the decile rating, the number of teaching and part time staff in the school, and the number of children on the roll. In the course of analysis the schools were discussed by their colour for clarity of discussion.

Table 6. 0 Summary of School Characteristics and Identity of the Schools Involved in the study

School	Status	Decile Rating		No of teaching staff	No of Chn
Pink		High Burnout	10	15, 3 p/t	310
Green		High Burnout	10	14, 2 p/t	293
Blue		Low Burnout	10	16, 3 p/t	358
Red		Low Burnout	9	15, 2 p/t	350

6. 1. 4 Criteria utilised to select the four schools for Phase Three

From the 53 schools who participated in Phase Two, the two schools that had the highest overall mean school scores from the Maslach Burnout Inventory emotional exhaustion subscale, and the two lowest mean school scores on the emotional exhaustion subscale were selected for the in-depth study reported in this chapter. The EE (emotional exhaustion) subscale was used as a selection criterion as it has been repeatedly identified as the most significantly robust component measuring burnout in the Maslach Burnout Inventory. It was also important to establish that the school scores selected were not affected by outliers, therefore an ANOVA was carried out to examine the distributions of EE scores across the four schools. Looking at all schools' individual means, when outliers where manually removed, the newly calculated score still reverted to the old mean for two of the schools, and for the other two means, it was one or two points different from the original mean.

Table 6.1 shows the EE means and standard deviations for the four high and low burnout schools. Table 6.2 shows the results of the ANOVA confirming that there were significant differences between the high and low schools on the EE scores. Table 6.3 shows a post-hoc analysis where individual EE means were compared with one another. This shows that only the means for high versus low EE schools were significant.

Table 6.1 Emotional Exhaustion Means & Standard Deviations for the Four Schools

Type	School	Mean	.N	Std Deviation
Pink EE	10	33.22	9	7.00
GreenEE	35	37.56	9	12.02
Red EE	25	22,29	17	13.10
Blue EE	52	19.55	11	8.02
Total	Total	26.76	46	12.71

Table 6.2 Differences Between and Within Schools for EE Scores

	Sum of Squares	df	Mean Square	T	Sig.
Between Groups	2336.335	3	778.778	6.627	.001
Within Groups	4936.034	42	117.525		
Total	7272.370	45			

Table 6.3 Analysis of Individual Emotional Exhaustion Subscale Scores for the Four Schools

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
School	School				Lower Bound	Upper Bound
Pink 10	25	10.93	4.47	.130	-2.09	23.94
	35	-4.33	5.11	.868	-19.22	10.55
	52	13.68	4.87	.063	-.51	27.87
Red 25	10	-10.93	4.47	.130	-23.94	2.09
	*35	**-15.26**	4.47	**.015**	-28.28	-2.25
	52	2.75	4.19	.934	-9.47	14.97
Green 35	10	4.33	5.11	.868	-10.55	19.22
	*25	**15.26**	4.47	**.015**	2.25	28.28
	52	**18.01**	4.87	**.008**	3.82	32.20
Blue 52	10	-13.68	4.87	.063	-27.87	.51
	25	-2.75	4.19	.934	-14.97	9.47
	35	**-18.01**	4.87	**.008**	-32.20	-3.82

Note: * The mean difference is significant at the .05 level.
Bold type denotes means that are significantly different from others using the Scheffe Post Hoc Comparison

Three additional criteria were incorporated for choosing the schools for this phase of the study. These included: 1. The Principal must have been in the school for the last two years. The rationale for this was that this would be enough time for the Principal to have established his/her own style of leadership and running of the school. 2. That at least 8 teachers must be in the school and 80% of these should be full time. The rationale for this criterion was to ensure that the four schools had a similar sample of full time teachers and that the school were of similar size. 3. That the schools are in close location to each other. The rationale for this criterion based on the previous phase's procedural requirements that the study be conducted within the North Shore City zoning. This location was accessible to the researcher and manageable in terms of size.

Although bias was possible with the purposive sampling of the four school organisations, the criteria (stated above) established for the study were intended to limit the degree of bias present because the selection process was based on known characteristics (Isaac and Michael, 1982). Choosing two types of organisations that differed in burnout characteristics increased the variability of the sample and enhanced the possibility of achieving an understanding of organisations and stressors inherent in each. Also the use of triangulation or multiple methods allowed the collection of various types of data and assured optimal conditions for congruence of data from various sources. Although the small sample limited the generalisability of the findings, it was determined that four schools would enable some useful comparisons to be made between the schools.

6. 1. 5 Issues of Trustworthiness

The research was designed and carried out to ensure that it was a trustworthy study of the factors involved in teacher burnout. The study attempted to satisfy the four main criteria of trustworthiness: a) confirmability; b) credibility; c) dependability; and, d) transferability (Lincoln and Guba, 1985).

The criterion of confirmability (objectivity) refers to the degree with which the method and data were shown to reflect and further the researcher's self-interest or the researcher's bias. It also clarifies the researcher's assumptions, world view and theoretical orientation. This criterion was met by providing the researcher's theoretical orientation and philosophical assumptions in chapter three of this study. Thus the decisions made by the researcher throughout the research process can be seen as justifiable and there is an adequate record of data that could would enable someone else to follow the transactions and decisions in relation to the study's findings.

The criterion of credibility (internal validity) refers to when the findings, interpretation and analysis are found to be acceptable by the research participants and by other researchers who judge the reported results as being faithful to the data. Another way of stating this is the question; "how congruent are the findings with reality," or, "do the findings capture what is truly there?" Internal validity thus hinges on the meaning of reality. Ratcliffe (1983) offers an interesting perspective on assessing validity. He suggests that (1) data do not speak for themselves, there is always an interpreter or translator; (2) one cannot observe or measure a phenomenon/event without

changing it, even in physics where reality is no longer considered to be single-faceted'; and, (3) that numbers, equations, and words "are all abstract, symbolic representations of reality, but not reality itself" (p.150, cited in Merriam 1998, p.202). Validity then, must be assessed in terms of something other than reality itself (which can never be grasped).

Qualitative research is based on an assumption that reality is holistic, multidimensional and ever-changing. It is not a single, fixed, objective phenomenon waiting to be discovered, observed and measured as is the case in quantitative research. Merriam (1998) states that assessing the isomorphism between data collected and the 'reality' from which they were derived is thus an inappropriate determinant of validity. However it is important for the researcher to assess the validity of what is being observed and because human beings are the primary instrument of data collection and analysis in qualitative research, interpretations of reality are accessed directly through their observations and interviews. Thus 'we' (the researcher) are 'closer' to reality than if a data collection instrument had been interjected between us and the participants. Merriam (1998) also states that it is important to understand the perspectives of those involved in the phenomenon of interest, to uncover the complexity of human behaviour in a contextual framework and to present a holistic interpretation of what is happening.

There are however a number of strategies that the researcher can use to enhance internal validity. In this regard, Phase Three used five basic strategies as follows. The first included *long term observation* in which the researcher was involved in the study over a prolonged period of time (four months) and developed considerable rapport with many of the participants. This provided opportunities for continual data analysis and comparison to refine constructs and ensured a match between the researcher categories and participant realities. The second strategy was the use of *member checks* . This was where interview participants were offered their completed interview transcripts for validation. Interview participants were able to check and change the wording if they felt they were misinterpreted or mistakes were made. The third strategy was the use of *triangulation* of different research methods (see the triangulation checkpoints in the results section). This included cross-checking findings from the different forms of data (field notes, interview data and school documents) to confirm whether the findings were accurate and reliable. For example, when checking the perception that a

school's principal expected 'good planning and high efficiency', field notes and four out of six interviews confirmed this. That is, the researcher's observations and four out of six staff believed that the principal expected good planning and high efficiency. The fourth strategy was *peer examination.* This involved colleagues from the Research Advisory Committee who were asked to comment on the methodology and the findings as they emerged. The fifth strategy used what Erickson (1973) calls *disciplined subjectivity.* This incorporated reflection, introspection and self-monitoring to expose all the phases of this research to continual questioning and re-evaluation, thus enhancing the overall precision and accuracy of the research process.

The criterion of dependability (reliability) refers to the consistency of the research findings and the fit between the reported data and what actually occurred in the collection of data. Another way of stating this is: "If the study is repeated will it yield the same results?" Reliability is problematic simply because human behaviour is never static. Qualitative research seeks to describe and explain the world as those in the world experience it. Since there are many interpretations of what is happening there is no bench mark by which to take repeated measures and establish reliability in the traditional fashion. The logic of relying on repetition for the establishment of truth is limited as measurements, observation and people can be repeatedly wrong. For example because a number of people have experienced the same phenomenon does not make the observations more reliable, thus the replication of a qualitative study will not yield the same results. Lincoln and Guba (1985, p.288) suggest thinking about the 'dependability' or 'consistency' of the results obtained from the data. That is, rather than demanding that outsiders get the same results, a researcher wishes outsiders to concur that, given the data collected, the results make sense, they are consistent and dependable. This study engaged a number of techniques to ensure the results were dependable. Firstly, triangulation using different data collection techniques and analysis, strengthened reliability as well as internal validity. Secondly, an audit trail was established to authenticate the findings of the study (see Appendix 6). The methodology used in this part of the study includes detail about how the data were collected, how categories were derived and how decisions were made throughout the study.

The criterion of transferability (external validity) refers to the researcher giving sufficient descriptive information for someone else to be able to transfer the research design to another similar site. In other words: "how generalisable are the results of this research study?" It has been argued that applying generalisations from the aggregated data of enormous, random samples to individuals is hardly useful. Overall, the issue of generalisability centres on whether it is possible to generalise from qualitative enquiry in general, and if so in what way? The question of generalisability has plagued qualitative investigators for some time. Cronbach (1975) makes the point that since generalisations decay in time, even in the hard sciences, they should not be the aim of social science research. However Merriam (1998) states that certain strategies can be used to enhance the possibility of generalising the results of a qualitative study. One strategy is using rich, thick description which provides enough description so that readers will be able to determine how closely their situations match the research situation, and hence whether findings can be transferred. Another strategy is reader or user generalisability which involves leaving the extent to which a study's findings apply to other situations up to the people in those situations. Firestone (1993) called this "case to case transfer" where it is the reader who has to ask, "what is there in this study that I can apply to my own situation, and what clearly does not apply?" However Lincoln and Guba (1985) contend that the researcher has the obligation to provide enough detailed description of the study's context to enable readers to compare the 'fit' with their situations. This is clearly achieved in the results section where the environments of the four schools are given rich, detailed descriptions which would enable researchers and readers to compare with their situation. Another strategy (also used in Phase Three) to increase external validity was the use of multiple sites, which helped to maximise the diversity between the high and low burnout school environments.

By way of summarising this section on validity and reliability, most of it is framed from assumptions underlying positivist or quantitative research. However, using the world view of qualitative inquiry in which there are multiple constructions of reality, where the researcher is the primary instrument of data collection and analysis and where meaning and understanding are of paramount importance, these issues take on a new slant. Phase Three, therefore, used multiple safeguards, including triangulation, member checks, long term observation, and a qualitative audit (see appendix

6), carried out by a PhD researcher. Multiple and diverse sites, a purposive sample that could easily be replicated and a methodology and results sections that includes a sufficiently detailed account of the procedures and research techniques (including rich, thick description) have provided sufficient information for anyone contemplating carrying out a similar study. Having discussed the issues of trustworthiness, the following section continues the methodology, looking at ethical issues.

6. 1. 6 Ethical Considerations

The research process during Phase Two and Phase Three required a submission to be made to the Massey University Human Ethics Committee. The application was approved by the committee and was guided by the ethical requirements as recommended in the *Code of Ethical Conduct for Research and Teaching involving Human Subjects* (Massey University, 1995).

It was important for the schools and the participants in the schools that they be assured of confidentiality, and that their identity be protected. However, as individuals they were also given the opportunity to be acknowledged as a consultant to the project. Staff who took part in interviews were given code names as were schools. A confidentiality declaration procedure was used for transcribing interviews and interview summaries are not included in the appendix to protect the identity of participants. At all times information collected was treated as confidential.

Consent was obtained from participants throughout all parts of the study. All interviewees gave verbal and written consent and all participants were fully informed of the purposes of the research and were free to withdraw or not participate at any time. The researcher attempted to collect data with the minimum inconvenience to the participants and staff were kept informed of the study's progress by written information sheets and weekly notices. At the end of each school's study, the researcher gave a final report to the staff and a stress management workshop was given to three out of the four schools (one school was unable to participate because of time constraints).

6. 1. 7 Description of the Interview

The interview schedule elicited information about the organisational structure and culture of the school. The interview explored eleven themes under two broad categories: *'Inside Influences'* and *'Outside Influences'*. Themes included

in the *'Inside Influences'* category included: a) Stress and Work; b) School Culture; c) Workload/Administration; d) Leadership, Administrators and Decision-Making; e) Rules, Regulations and Expectations; f) Interpersonal Relationships; g) Staff Relationships; h) Staff Attitudes, Values and Behaviour and i) Physical Environment. Themes included in the *'Outside Influences'* category included: j) Tomorrow's Schools; k) Society Changes; and l) Board of Trustees (see Appendix 5). The themes and related questions included in the schedule were prepared with reference to previous research on teacher burnout, particularly those that used interview techniques (i.e. Nias, 1986; 1991; Blase, 1986; and Friedman, 1991). Principals were given an adapted version of the above interview schedule suited to their leadership role.

The researcher was able to ask further questions under each of these themes when appropriate or steer discussions onto new themes if going off track. The use of a semi-structured interview schedule was designed to ensure that every respondent was asked the same questions and ensured that specific questions vital to the research were covered by all interviewees. This also ensured reliability and contained the interview within certain time limits.

At the beginning of each interview the participant was reminded of the purpose of the research and was asked to sign a consent form granting permission for the interview to take place, for the interview to be taped and told of the right to remain anonymous (see Appendix 4). The interview was then recorded, with the participant's permission, on an audio cassette recorder. The participant was given a copy of the interview schedule prior to the interview, and was asked for any comments about it at the start of the interview. As well as giving the participants a chance to think about the questions beforehand, this procedure also gave them control over the process and is likely to have added quality to the discussion. The interviews generally lasted 40 - 60 minutes.

The interview technique selected for this phase of the study was designed to collect the relevant contextual information concerning the teachers perceptions of their work environment. The interviews were designed to follow an informant style (Powney and Watts, 1987), and the researcher aimed to follow the example of Stenhouse (1984) where he states:

> "It is part of my job to give people the feeling not merely that they

> have my ear, my mind and my thoughts concentrated on them but that they want to give an account of themselves because they see the interview as in some way an opportunity: an opportunity of telling someone how they see the world". (p.222).

Using this example enabled the researcher to encourage the participants to express their own opinions and concerns freely, give them control over the interview and get them to tell 'their' story. It has also been claimed that semi-structured interviews are an invaluable research technique in eliciting qualitative data on teachers' perceptions and beliefs (Kagan, 1990). The value of qualitative research in eliciting beliefs is well documented (e.g., Kagan, 1992; Pajares, 1992), and the interview technique complemented and built upon the written field notes and observations gathered by the researcher. The interviews also allowed the researcher to have an active role in the data collection process where responses could be drawn out and fully explored in relation to the research questions. The interviews also helped the researcher to be open to other possible themes that were important to teachers in relation to burnout. Staff interviews were transcribed by the researcher, coded and then thematically analysed in terms of the interview themes (see 6.1.9) Transcribing the interviews proved very valuable in helping to code and analyse the responses within their appropriate contexts.

6. 1. 8 Field Notes

During the school visits, field notes were recorded in notebooks exclusive to each school. The field notes described environmental events and contained both personal interpretations and strictly non-personal interpretation data. The data from the very beginning were strategically guided by the emergence of categories. Variation on categories of notes is found in ethnographic literature. Four different types of field notes were recorded for this phase based on Richardson's (1994) work which builds on Glaser and Strauss's (1967) work. This included: 1) observational, 2) theoretical 3) methodological and 4) personal. Observational notes described environmental events such as morning assembly and contained as little interpretation as possible. Theoretical notes were derived from observational notes and attempted to derive meaning from observed events with links to the stress and burnout models. Methodological notes were self instructions as well as critiques of the methods used in the data collection. Personal notes reflected the investigator's

own reactions, reflections, and experiences occurring during the site visit. All types of field notes were incorporated into the data analysis of this study. The details of how the field notes were organised and coded is discussed in 6.1.9.

6. 1. 9 Data Analysis and Management

The data analysis for Phase Three consisted of a combination of qualitative procedures designed to generate understanding of teacher burnout and identify environmental characteristics that contributed to low and high burnout. The *qualitative* analysis and data management of Phase Three involved a number of procedures that were designed to generate an understanding of the high and low burnout school organisations. The data collected from the field notes, interview data, consultations and meetings, were collected and analysed according to qualitative guidelines developed by Bogdan and Taylor (1975), and according to specific guidelines for grounded theory research and offered by Glasser and Strauss (1967) and Glasser (1978). This method termed the 'constant comparative' method of data analysis is basically a strategy where one constantly compares incidents, respondents' remarks and so on with each other. Units of data, bits of information are sorted into groupings that have something in common. These comparisons lead to tentative categories that are then compared to each other and to other instances.

Hammersley and Atkinson (1995, p.209) say the initial task with analysing data "is to find some concepts that help us make sense of what is going on in the scenes documented by the data". The process for the analysis of data for Phase Three, was separated into two separate processes, (1) data organising and (2) data processing. However the two processes were intertwined and sometimes happened simultaneously. Tesch (1990a) also provides valuable insights on the mechanics of organising and interpreting qualitative data. Tesch defines analysis in the following way. "Data analysis" refers to a process which entails an effort to formally identify themes/categories and to construct hypothesis (ideas) as they are suggested by the data and an attempt to demonstrate support for those themes and hypotheses' (ibid, p.113). Thus Phase Three began with questions rather than hypotheses. Data that were generated and examined through the constant comparative process focused on the discovery of substantive categories and relationships between and among categories. The codings and categories that emerged from the data were incorporated into the results. These were checked by a research auditor

as part of the audit trail to see that the codings were accurate (see Appendix 5). However the three main environmental components or theme headings: administrative, social and physical environments, were based on Friedman's (1994) published categorisation of high and low burnout school environments. Substantive categories or themes within the three focal environments were allowed to 'emerge' directly from the data, with the research questions serving as a focus for the data analysis.

The first task of data organisation involved partitioning into small segments the enormous amount of information gathered from the numerous observations, discussions and other field notes. This process of identifying the unit of analysis for 'de-contextualisation' (that is, the process of separating relevant portions of data from context), involves data categorising and sorting, with the unit of analysis being either a word, a sentence, a paragraph (Strauss and Corbin (1990a), or a 'segment of text that is comprehensible by itself and contains one idea, episode or piece of information' (Tesch, 1990a). In determining the unit of analysis, the researcher decided to use separate words, phrases, or sentences to derive categories which were based on themes appearing in the interview about the structure and climate in the primary schools. Transcribing and reading the interview data and field notes helped to draw out the themes that repeatedly came up and to help to establish categories.

The second task of data organisation used a strategy that included coding the units of analysis according to the categories representing emerging themes or concepts. Transcribing the interviews proved very valuable in helping to code and analyse the responses within their appropriate context. This process began by carefully reading through each transcript/field notes, and using a system of file folders. A photocopy of the entire database was made and, working page by page, notations were written in the margins, including tentative categories or themes emerging from the raw data. The photocopied pages were then cut up, and coded sections were placed into folders labelled by category or theme. Each unit of data needed to be coded not only by category but by its original page number and other identifying codes such as the participant's name and school for example. Each cut up piece of information was able to be located in the master copy.

The third and final level of analysis after organising and processing the data involved making inferences, developing models, and generating theory. Miles and Huberman (1994) write that this involves moving up 'from the empirical trenches to a more conceptual overview of the landscape' (p.276). This process is presented in the discussion where the researcher makes inferences about the data and where future activity is speculated.

6. 1. 10 Maintaining Rapport and 'Being an Ethnographer'

The first two weeks (4 visits of approximately 5-6 hours each) in each school were spent getting to know the teachers, learning their names and the positions they held and talking and working with them. Considerable effort was made to appear helpful, friendly and 'unknowledgeable' in order to learn how the school was run. This was intentional for two reasons. First, I wanted them to explain to me how things worked, or how they perceived their work. Second, I wanted to become accepted into each of the schools, and did not want to appear threatening or that I was out to evaluate their performance or judge them in any way. Initially, for the first couple of weeks, at times I felt like an alien but I blended in by keeping the same hours as they did, offering help to teachers and socialising with staff. My priority was to blend in with the teachers, yet be unobtrusive. Consideration and becoming accustomed to each school's culture, was helpful in gaining acceptance. For example, specific activities such as washing up dishes in the staffroom, bringing in morning tea and offering assistance frequently softened the staff's perceptions or attitudes towards me as an 'outsider' and helped to gain their confidence and maintain rapport.

Although it is likely that I was perceived as the 'researcher', in some ways this helped as I could act as if I knew very little about teaching and schools and this helped to get teachers talking and explaining their ideas about how their school worked. Also I was always careful never to take notes in the classroom or when having an informal discussion (notes would be rapidly jotted down after the event and in private), again to avoid being perceived as working in a judgmental or evaluative way. In some ways not being a teacher helped because I was on 'nobody's side', I was not going criticise or judge them, yet I was curious and interested in what they had to say. Another rule that aided in maintaining rapport was in making sure that all the information collected was confidential. Sharing my own life experiences, as well as listening to others, also built up trust and many teachers confided problems

that were going on in the school. Thus I was able to, as Ramsey (1990) points out, "immerse myself in the lives of people so as to gain an understanding of the situation" (p.92).

In all four schools the staffroom was used as a base, as this was the 'hot house' were most of the information was exchanged, especially during morning and lunch breaks and staff meetings. This centre of operations provided a flow of information about other sites within and outside the school where data could be collected. Corridors, classrooms, libraries, secretaries' offices, playing fields and school entrances also became areas where information could be checked as alternative sources. As time passed and my presence became less threatening, interviews were requested and most staff that were asked agreed to be interviewed. Even though there were many deadlines and time constraints of staff, it was surprising and gratifying to find that staff were happy to give up their time (on average 1-2 hours) to discuss their professional lives. Interviews were mainly done in lunch times or after school, and provided rich data often revealing difficulties and problems staff were having at the time. The need of many teachers to reflect upon their professional lives in my presence was surprising and revealed their need to express openly or 'release' frustrations of daily working life. "Piercing the surface veneer" is how Ramsey (1990, p.95) explains the step of establishing confidence with those who are being researched. Being able to get beneath the surface of the school's culture was both satisfying as a researcher and helped me move beyond my own 'limited or biased' perspective. It also proved that I had indeed gained rapport with staff and that acceptance had occurred.

Beyond the criterion of credibility and dependability, is the issue of 'observer effect' (Rose, 1989), 'impression management' (Goffman, 1957), or the possibility of people under observation changing their behaviour to meet what they consider the researcher wants to see and hear. The challenge as an ethnographer of remaining neutral is an important element of ethnographic research. This can be difficult to achieve when being involved in the 'school' being studied in order to gain rapport but at the same time required to stand outside the situation and regard it from a neutral perspective. On a few occasions I felt like a staff member, and on one occasion, at a staff farewell function, I felt sad to see the teacher leaving. These situations were however not frequent and in the main reliable data were collected in a relatively neutral manner. The triangulation of different research and data gathering

techniques also provided another check on the involvement of the researcher. For example those who were interviewed were invited to view their transcribed interview script and correct any misapprehensions on what had been observed or discussed. This enhanced the overall precision and accuracy of the research processes.

6. 2 Phase Three: Results

This section presents the findings from the qualitative data acquired in Phase Three which compares two low burnout school environments with two high burnout school environments. The three research questions based on the aims stated in the introduction include:

> *What are the characteristics of school environments associated with high self ratings of burnout in primary school teachers?*
>
> *What are the characteristics of school environments associated with low self ratings of burnout in primary school teachers?*
>
> *What noticeable differences are there between the two high burnout schools and the two low burnout schools?*

Before the data analyses are presented a description and general impression of each of the four schools is given in section (6.2.1) below. This impressionistic information was gathered through observations, conversations, teachers' stories and meetings and provides important relevant information about the characteristics of the school.

The first set of data presented in this results section outline the three main environmental components and the sub-themes that emerged from the qualitative data in the high and low-burnout schools. Following these qualitative results is a summary of the findings.

6. 2. 1 Description and General Impression of each School

Green School (High Burnout)

Green school is located in Auckland in a middle class residential suburb. The school is a relatively new school, built in 1976, and is co-educational. It has a roll of 293, and has an ethnic composition of 84% Pakeha, 5% Maori and 11% Asian. A special feature is that all classes operate in variable space often

called 'open plan'. In this situation two (or sometimes three) classes are joined together (an open door separates the classrooms) and children do not have an individual desk but share a large desk with about 6 others, and are taught by one, two or three teachers, depending on the activity. The school is state operated, providing primary education training for children from the age of five (Year 1) through to the age of eleven (Year 6). The school is decile 10, with 14 teaching staff (14 female), and two part time teachers.

Green school includes five classroom blocks, a library, lunchroom, administration and large staffroom, resource room, dental clinic, speech therapist office, caretaker storage, boiler area and toilets, and an adventure playground. The staff room is large, comfortable and light with good kitchen facilities. Notice boards cover one corner of the room with weekly planners and staff development notices, and vertical stands near the doorway provide developmental network newsletters and school supplies. Teacher trays were allocated to the five school teams and teachers did not have their own individual trays.

The school's office and principal's office were in a separate block and well signposted. The school is situated in a quiet road and placed very closely to an intermediate school thus playing fields were often shared for sporting events. The outside physical environment appeared less tidy and more littered and children's seating was chipped and needed painting. However the surroundings were pleasant with nice gardens and trees, multiple playing areas and good carparking facilities for staff and visitors. The school has two support networks, the first one is an 'Asian Network' which aims to facilitate communication between the school and home and provide support for new families joining the school from overseas. The second support network is a 'New Families Support' which includes a buddy system for families who are new in the area. New families are put in contact with a family already living in the community which can tell them about doctors, dentists and other community facilities.

Green school is divided into a five team structure called home groups which are socially grouped for administrative purposes. The home groups consist of 'Rata' a new entrant to year three class, for pupils in their first years of school, 'Kauri-iti' a new entrant/year one class, for pupils in their first year of school, 'Kauri-nui' for pupils in their 3rd and 4th year of school, 'Nikau' a Standard 2

and 3 class for pupils in their 4th and 5th year of school and 'Totara' a Standard 3 and 4 class for pupils in their 5th and 6th year of school. The school sends out a regular newsletter once a week and welcomes parent involvement. Green school has an 'open door' policy where parents 'are most welcome in the school at anytime'. Parents are also able to see the principal throughout the day, especially between 8.45 and 9.15 in the morning.

Green school is situated in a middle class suburb, and general impressions were that the school was less formal than the other schools. On the first and subsequent meetings with the principal there was no one around in the administration area. On one particular visit, the Principal's office was empty, the secretary was absent and later appeared rushed and disorganised. Visitors were left waiting. The Principal however was very well-meaning and, as he was later to inform me, 'the children were his first priority' and his door was always open to the children. Other strong impressions were the high noise levels and seemingly chaotic behaviour in classrooms. Most of the teaching was in variable space, meaning that three classes of children were all together and many different activities were going on at the same time. Teachers also appeared to be rushed and worn out having to co-ordinate the different group activities and give advice to parent helpers.

Pink School (High Burnout)

Pink school is located in Auckland in a middle class residential suburb. The school is a relatively new school, built in 1980, and is co-educational. Pink school is variable space, has a roll of 310, and an ethnic composition of 18% Asian, 4% Maori and 78% Pakeha. Each space is linked, sometimes by large folding doors, and sometimes by conventional doors. The variable space allows for the flexible cross-grouping of children and for better use of teacher strengths and interests. However the conventional use of single classrooms is also well used. The school is state operated, providing primary education training for children from the age of five (Year 1) through to the age of eleven (Year 6). The school is graded decile 10, with 15 teaching staff (12 female, 3 male), and three part time teachers.

Pink school includes five classroom blocks, a school library and parent library, lunchroom, administration and large staffroom, resource room, dental clinic, speech therapist office, caretaker storage, boiler area and toilets and an adventure playground and pool. The staff room is large, and well organised.

The walls are nicely decorated with bright daisies drawn by the children. Hessian boards with blue cards provided information on teacher development and the New Zealand Education Institute information for example, and includes other information such as timetables. The kitchen is very tidy and has a sign saying 'duties' with a list of things to do. Each teacher's tray has their own individual tray for mail and notices.

The school's office and principal's office is directly in front of the road, and visitors are told not to park directly outside the school. The school is situated in a quiet road, away from the main road with new housing subdivisions close by. The outside physical environment is spotlessly maintained and has large areas of grass and trees for the children to play. The school has a support network, 'Friends of Pink School' which aims to 'further the general welfare of the school in the wider community' and focus on social and fund-raising for special projects.

Pink school is divided into a three syndicates junior middle and senior, each having a syndicate leader. Children have a 'home' teacher and a 'home' class but may move to another space or to another teacher for some teaching subjects. The school sends out a regular newsletter once a week and does not have an open door policy. Parents are not allowed to come and help out but new parents are able to attend the 'New Parent Morning Teas' which occur at regular intervals throughout the year. Parents who have any concerns are informed that teachers have commitments before, during and after school, and are requested to make an appointment by contacting the office.

General impressions of Pink school are of a middle class, very organised, school having immaculate grounds and strict rules which are rigorously monitored. On entering the school, the researcher was told to check in with the secretary (every time) and visitors were strictly monitored. This however may have been due to the fact that the principal's office had recently been broken into with money stolen and damage carried out to the room. The atmosphere during visits seemed very tense and the principal's manner was curt and abrupt. This school was the hardest to 'break into' and gain confidence among staff. Other strong impressions were that teachers were wary of speaking out on teaching matters which was later to reveal inherent dissatisfaction among staff. The children appeared well controlled even with

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Red School (Low Burnout)

Red school is located in Auckland in a middle class residential suburb. Being older than the other schools, the site of the school was established in 1918, where it was used as a hospital for the influenza epidemic. The original building was replaced in the late 70's by a flexible teaching space block. The remainder of the school has been extensively remodelled internally. The school is co-educational, has a roll of 350 and has an ethnic composition of 82% Paheka, 8% Maori and 10% Asian. The school is state operated, providing primary education training for children from the age of five (Year 1) through to the age of eleven (Year 6). The school is graded decile 9 and there are 15 teaching staff (13 female, 2 male), two part time and three teacher aides.

Red school includes 13 classrooms, a library, an information centre (being built at the time of the study), a lunchroom, administration and large staffroom, resource room, dental clinic, speech therapist office, caretaker storage, boiler area and toilets, an adventure playground and school pool. The staff room is large, comfortable and light with good kitchen facilities. Notice boards covered one side of the wall and shelves and staff cupboards

were well placed with weekly planners, staff development notices, New Zealand Education Institute material, policies, staff duties, memorandums and other teaching documentation. The school's office and principal's office were well signposted as there were a number of entrances to the school. The school is situated very closely to a main road with much traffic and fumes and steep banks and high paths on certain sides of the school. Thus the physical environment is a mixed one with quiet areas of shaded spots with avenues of trees, older areas since its earliest days with old concrete blocks, painted hopscotch's and four squares, and new areas under construction. A group known as 'Friends of Red School' recently established to provide support in terms of funding and promoting projects, has also helped provide a forum for parents and school to share ideas and concerns on the schooling process.

Red school is divided into three teams or syndicates. Each team include a team leader who is also a senior teacher. The teams consist of a year one and two team, a year three and four team and a year five and six team. The school sends out regular newsletters/notices and welcomes parent help for the younger children at certain times of the week. This however was not an 'open door' policy where parents could drop in and visit their child's class to see how things were going. Parents are advised in the school prospectus to make early contact by leaving a message for the teacher to make contact to arrange a meeting time and if this is unsuccessful contact the principal.

General impressions of Red school are of a lower/middle class, very up-to - date, well organised, efficient, proactive and forward thinking. These impressions are probably because of the young principal who gives observers the impression of being well informed, a member of the New Zealand Education Institute and actively involved in curriculum development initiatives. The aims and objectives are clearly stated and prioritised goals are also outlined in the school prospectus. The children also appeared well controlled and orderly, similar to those seen in Blue School. Noise levels were reasonable and in assemblies the children were orderly and generally well mannered.

Blue School (Low Burnout)

Blue school is located in Auckland in a middle class residential suburb. The school was first proposed in 1959 and opened in 1967. Blue school is co-educational has a roll of 358, with an ethnic composition of 80% Pakeha, 6% Maori and 14% Asian. The school is state operated, providing primary education training for children from the age of five (Year 1) through to the age of eleven (Year 6). The school is graded decile 10 and at the time of study is not bulk funded. There are 15 teaching staff (13 female, 2 male), 3 part time and one teacher aide.

The school occupies 2. 5 hectares of land which includes 15 classrooms, a library, lunchroom, administration area and staffroom, resource room, dental clinic, caretaker storage and boiler area, two adventure playgrounds, a fitness trail, school pool and a hall. The Board of Trustees were working through a proposal to upgrade the school hall, because of its small size and dreary setting at the time of the study. The staff room is located next to the administrative area and one can see anyone coming from outside the school. The staffroom is small (requiring a few teachers to stand), attractively decorated with kitchen facilities and has a number of noticeboards on two different walls. One side had a single noticeboard with a day and weekly planner setting out what was on in the current weeks, for example, visitors to the school, cultural and festival events, duties and dates of the principal's overseas visit. The school's office where people enter the school, has a wall of past principals' photos which give the observer a historical view of the school and an air of tradition and formality.

Blue school since its earliest days has been characterised by close community involvement and an active Parent-Teachers Association (PTA) which meets monthly and provides an important link between staff, parents and the children. It has provided support for fund-raising and has added to many resources in the school such as library books and computers. Blue school is divided into two departments, a junior (years one, two and three), led by the an assistant principal and a senior (years four, five and six), led by the deputy principal. The school sends out regular newsletters and believes in both formal and informal communication between the parent and the teacher. This however did not translate to an 'open door' policy where parents could visit their child's class to see how things were going. Parents are advised in the school prospectus that they were 'welcome at any time to make an

appointment with their child's teacher, to discuss progress or voice special concerns'.

Initial general impressions of Blue school are one of a middle class, well off, well resourced school which has a strong support network, with well established traditions and rules that keep the system intact. Teachers appeared to be very aware of what was 'expected' of them, were well dressed, and professional in their manner. The children also appeared well controlled, orderly, and noise levels seemed to be lower in comparison to the other schools that the researcher visited.

6. 2. 2 Environmental Components

There were three main environmental components that emerged from the qualitative data analysis which are discussed in detail below These included: the administrative environment, the social environment and the physical environment. The abbreviations which are used for the rest of this chapter are set out below.

Principal	**(P)**	**Green School**	**(Sg)**
Deputy Principal	**(DP)**	**Pink School**	**(Sp)**
Assistant Principal	**(AP)**	**Red School**	**(Sr)**
Teacher	**(T)**	**Blue School**	**(Sb)**
Beginning Teacher	**(BT)**		
Board of Trustees	**(BOT)**		
Chairperson	**(C)**		

6. 2. 3 The Administrative Environment

Bureaucracy or problems with administration appeared to provide a major source of stress or dissatisfaction among staff particularly in the high burnout schools. Leadership style, the principal's level of efficiency and the way in which decisions were made among staff appeared to have a significant effect on teachers and their self esteem and the general morale of the school. High work load or demands made on teachers in all schools were frequently mentioned to be major contributors to teacher stress and burnout. The different ways administrators dealt with workload, whether it was fairly distributed amongst teachers was also important to teachers' levels of stress. Role ambiguity, or having clearly understood roles and expectations, was another important factor in the school's administrative environment.

Autonomy, in the sense of being self sufficient and being able to make one's own decisions, varied among the four schools and was reflected in the leadership styles used. All four schools' environments incorporated an attitude of efficiency and handled conflict in a variety of ways. There were differences however in the way that high and low burnout schools engaged in planning and problem solving.

In the high burnout schools, (Green and Pink) there were two extreme leadership styles. Green leadership was strongly collaborative with decision-making shared, and Pink was strongly autocratic with decisions generally made by the Principal. Red and Blue Schools both shared similar styles having strong leadership combining collaborative and autocratic elements. In the low burnout schools, (Red and Blue) the administrative environment included leadership styles that were less extreme and used a combination of strong leadership, where certain decisions were made by the principal and others by collaborative means.

The data and information presented below illustrate the contrasts between the administrative environments and verifies differences where these exist. An attempt was made to triangulate the data through convergent evidence from interviews, observations and anecdotal information (see triangulation checkpoint data in Appendix 5).

The following discussion provides further detail on each school's administrative environment. High burnout schools Green and Pink will be discussed first followed by the low burnout schools, Red and Blue.

6. 2. 4 Green School - Administrative Environment

Leadership/Decision-Making and Efficiency

Green School had a principal who believed the school had to be team based and emphasised a collaborative approach in both style and decision-making. The principal of Green school delegated areas of his work and stressed the importance of sharing the leadership role:

> We are child centred, in that we are collaborative, co-operative. Our school is wonderful at doing things collaboratively and co-operatively and we are child focused in all we do. (Sg/P)

However it became clear from observational notes and three out of four interviews that teachers were frustrated with the shared decision-making or collaborative style of leadership. The chairperson of the board of trustees observed:

> Because the staff work collaboratively, there is a pressure due to the time it takes to get consensus, also the energy and commitment it takes to get decisions. For example, if an autocratic leader just said "do it this way", you'd just do it, you may not be happy about the way its done, but you wouldn't have to spend ages working through how it would or could be done. (Sg/C/BOT)

During one particular staff meeting, the principal asked staff lots of questions to get them thinking, thus directing the flow of thinking. This was evident in questions such as: "how do we give parents the message of whether their child is flying ahead, staying afloat or having difficulties?". The principal continued challenging teachers to think about their reports to parents. After a while it appeared that the teachers were getting frustrated. They wanted the answer and they wanted the principal to *give* them the appropriate guidelines rather than continue with the discussion. During this meeting, a few of the older teachers displayed cynicism (one of the newer dimensions of burnout), smiling mockingly, as if the discussion was all 'old hat' and they knew what to do. The principal tried hard and used compliments but it was clear that this form of discussion was tedious and frustrating. The younger teachers especially wanted direct leadership:

> Sometimes it's good sharing views on things, but mostly I just want to be told what I need to do so I can get home. I mean I've so much to do before tomorrow, I know (P) means well, he cares and everything, but it just takes ages...(Sg/T)

All four interviews confirmed the principal's collaborative style, and one senior staff member mentioned that some parents would see him as 'soft' but that he was actually on the ball and could make difficult decisions. Another teacher also reiterated that the principal was too collaborative and that a lot of time and energy went into making decisions when sometimes it would be easier and more efficient to have the decision made for them.

Further observational data and two out of four interview discussions revealed difficulties with the principal's managerial control. One example to highlight this was a discussion with the assistant principal who openly criticised his style stating that a more direct, stronger leader would be preferred and that she felt more stress because her ideals were not being met. Observations noted that the principal seemed to be always trying to please and pacify his staff, being careful not to upset or worry them. Journal data also suggests that many interactions with the principal were more 'casual' with less respect shown than witnessed at other schools.

Four out of four interviews revealed that the principal's approach to decision -making at Green school was collaborative and informal at times. Shared decision-making was observed frequently during staff and Board of Trustee meetings. One example of this informality and shared decision-making was witnessed during one morning break, when a teacher announced:

> The library staff has a number of bonus points, we could use the money ($500.00) to buy a video as the one in the school was very old and the heads were worn. Does anyone here not think its ok to buy this, we do have extra points?" (Sg/T)

Some staff nodded and said yes in agreement. This informal style of decision - making was not evident in the other schools.

Regarding efficiency, three out of four interviewees stated that there was a lot of time wasted getting group commitment, that many decisions were unnecessarily drawn out and that staff discussions were a waste of time. One

example of inefficiency exhibited was during one senior staff meeting (in the principal's office) where there were four phone call interruptions which disrupted the flow of conversation. The action of the principal to take these calls clearly interrupted the meeting process, (he did apologise to the staff members) however his priority of taking calls seemed to affirm his belief of being there for the children. One staff member talked about the lack of organisation saying:

> "We all work hard, it's not that we aren't doing enough, it's more that meetings take up so much time and are tedious with every one trying to put their five cents worth in. I'd rather go bang, bang, bang, make the decision quickly, say give two minutes to discuss the issue then take a head count, but here it just goes on and gets left till the next meeting when someone reports something else". (Sg/T)

One conversation in a home group meeting had a senior staff member complain about the time and energy they expended stating:

> "Look, we've all spent a lot of time on this unit plan. You would think that with all of us working on this we would be further ahead. We need to separate out tasks, make photocopies for each other and move on. We have to discuss the trip to Long Bay before we leave".(Sg/ST)

Another issue brought up many times in the field data was a lack of clarity. This issue was linked to inefficiency and included rules and regulations being rather vague and ambiguous and expectations of staff being unclear. During one interview a teacher mentions:

> "Expectations are not that clear. I don't actually know what the expectations are. There's a lack of leadership and decision-making. L (principal) is woffly and beats about the bush. I presume that's how others see it too". (Sg/BT)

Analysis of school documents regarding discipline, for example, indicated that policies and practices were not clearly specified and did not discuss clearly what a child had to do to be put on a behavioural management plan. The document did not mention clearly what behaviours were unacceptable (rules and regulations) and only stated in general terms how teachers would establish and encourage appropriate behaviour. One teacher affirmed this:

"There are many areas were inefficiency reigns. There's very few rules and regulations both for teachers and for children and so that's why there's endless discussion of issues in staff meetings". (Sg/BT)

Workload, Role Ambiguity, Expectations and Autonomy

The pressure of workload was extremely high at Green School, and there were many staff absent on sick leave during the study. Many teachers also looked physically exhausted and staffroom banter frequently included discussions of stress, workload, school holidays and difficulties with students. Three out of four interview discussions revealed that the workload was fairly distributed with senior teachers taking more responsibility but, as mentioned above, the collaborative shared decision-making was also seen as taking more time and increasing their already high workload. Three out of four interviews mentioned that the volume of paperwork was excessive, that there was needless assessments ('that no one would ever read') and that this was causing health and psychological problems. Two younger and recently appointed teachers mentioned that they felt extreme pressure to keep up with their home group and the shared responsibility of team teaching. One first year teacher stated:

I've found the workload really difficult, and when you're teaching in an open plan school, you're in a fish bowl, everyone knows, you can't shut the door and have a bad day. It's been good though, seeing how certain topics are taught but I feel I'm only just keeping up. (Sg/BT)

Three out of four interview discussions identified work load pressure to be partly due to the open plan layout and style of teaching. Frequently cited was the frustration and annoyance of having prepared a topic to teach that day with resources collected and then having a change of plan imposed due to some other priority. One teacher explained this further:

There's one thing that's really hard to stand, and that's the constant change, in that you plan something and you don't carry it out because something else happens and that's the priority. So if you have a great idea, you have to let it go. There's no way you can say 'no' because if you do then you're not 'one of

> them'. It's constant change, you might have planned something but you have to wipe it. It's stressful and it leaves you behind in your objectives. (Sg/T)

At Green School, the administrative structure was defined reasonably clearly with positions of responsibility such as deputy principal, assistant principal and senior teacher. However job positions changed over time with extra responsibilities given as issues came up, thus the impression that roles were flexible. There were also curriculum area teams, home group teams and other numerous areas of responsibility. This included learning support, staff development, road patrol, relieving teachers, social committee, pre-school liaison and so on. It appeared (from the researcher's perception) that the organisation of home groups, which were grouped for administration purposes, was less efficient than in the other four schools with their syndicate teams based on junior, middle and senior age group levels.

Two important findings to emerge from the data were the role ambiguity of the principal and lack of a staff appraisal system. Data from the principal's interview revealed the principal had difficulty with the new role placed on him by the *Tomorrow's Schools* requirements. The principal stated:

> The thing I find the most difficult is the changes in the role of the principal in relation to Tomorrow's Schools, with the style that is being imposed on us. I feel the biggest gap for me is that the way I would like to be a principal and the way I am being told daily I have to be. (Sg/P)

The principal's values and beliefs about the running of a school were in clear disagreement with *Tomorrow's Schools* advocating accountability, efficiency and effectiveness under a structured system. The principal of Green School advocated the belief that the performance of the school had to come from within, that it had to be team based and collaborative. The principal's lack of clarity regarding his role was to have a flow-on effect on staff. Observation data and the school's recent Education Review Office (ERO) report noted that there were classes where the teaching was less effective and that a balanced teaching programme was not being implemented. The report also stated the need to monitor the quality of planning, teaching and programme evaluation by staff.

The recent implementation of a staff appraisal system suggested that teaching staff were not getting sufficient feedback on their teaching and were not being given clear expectations of their role and responsibilities. Interview data illustrated that the principal (since the ERO report) was now having to monitor the teaching programme and that he found this 'very stressful'. Observation of meetings and the principal's working style also suggested that he found it very difficult to evaluate or highlight deficiencies of staff. This lack of administrative control was demonstrated by the principal's tendency to 'beat around the bush' and his desire to 'rescue' or help rather than focus on faults that needed rectifying. While this could be seen as endearing, in a sense it seemed to provide further stress as teachers were not given clear expectations and this accentuated their sense of role ambiguity. Highlighting these findings was the principal's admission that he "hated the 'public image' work" of being a principal and that he preferred working with children than adults. Despite this lack of clarity and efficiency, teachers still had a large degree of autonomy. Discussions with teachers revealed that many decisions were made throughout lessons and they had to use their own initiative on many occasions. First year teachers, as mentioned previously, did not have the same amount of autonomy as senior staff, but in general classroom decisions were left to the class teachers. In one interview a participant stated:

> "T (the principal) is very good at letting us do our own thing and he doesn't interfere at all, so yes we have a lot of autonomy, but we still have to stick to the curriculum guidelines and work in with our home group. With big school decisions it's very much a group process". (Sg/T)

Despite teachers being able to use their own initiative, it seemed clear from observations and discussions in this school that stronger leadership and clearer expectations were required.

6. 2. 5 Pink School - Administrative Environment

Leadership/Decision-Making and Efficiency

In Pink school, there was a diametrically opposed style of leadership to that of Green School. Three out of four teacher interviews at Pink school described the principal as being "autocratic", and "hard driving", who made decisions without consultation and used little delegation. Statements from teachers described her as "very quick to have an opinion about anything", and that she would make snap decisions. When asked about what the principal would do if a teacher had a problem, one teacher stated:

> "She'd take over and sort it, full stop, the end. She's not really the sort of person who would help you to solve the problem yourself, it's like ... all right I'll deal with it". (Sp/T)

Another teacher described the principal's style as "dictatorial", having very set ideas and stated, "she likes to think she is collaborative, but when it comes down to it she isn't". When discussing decisions made in syndicates, the teacher was also clear to point out that the syndicate decisions could be over-ruled from above and it was not easy to work this way. Another teacher expressed concern at the administration and stated that decisions had been made before they came up at a meeting and that issues discussed with the principal were not kept in confidence. One teacher stated:

> "We're only going through a procedure, often someone will say, 'well there wasn't any point in that meeting, it was all decided beforehand". (Sp/T)

It was also clear in the observation notes that there were difficulties and tension among teaching staff and administration. There were frequent displays of depersonalisation, such as negative, cynical comments made about the principal and the lack of support from the administration team. Further in-depth interviews revealed that there was an 'in group' that consisted of the principal and her buddy (L). It was apparent that individual teachers were under great pressure.

Further observational data and interview discussions revealed difficulties with the principal's managerial control. One example that revealed this was based on an observation during morning break. The principal, in front of all staff, read out loud a letter written by the deputy principal to parents (the DP

was not in the room). Astonishingly the principal was correcting this letter and was saying, "..I don't think (DP) should put this in the newsletter...". The principal proceeded to go through the letter and when the DP came in the room kept on correcting it. The principal then talked to him about making amendments. This incident appeared to be humiliating to the DP, extremely unprofessional and showed the principal's lack of confidentiality.

Another senior staff member, discussing her staff appraisal, felt that it was not handled professionally and that there was a lack of confidentiality in administration. Lack of confidentiality was repeatedly noted in the interviews (3 out of 4) and observation data where the principal would talk about children's parents, revealing personal information. On one occasion (during the morning break) the principal stood up in the staff room and imitated particular students, with the conversation appearing to be a gossip session. Observation notes revealed that during this event other staff laughed and chipped in and that it seemed that the principal did this to make herself popular with her predominantly female staff. This behaviour also revealed depersonalisation, where callous, cynical attitudes towards their students were shown. Apart from these occasions of informal conversation, on the whole the principal was tense, very controlled and appeared threatened and defensive in her mannerisms and in her interview. Reasons for this demeanour may have been due to a recent second burglary in the school and having graffiti sprayed on school walls. Interview data also revealed that the principal had in the previous year had a debilitating stress-related illness.

Initial observational impressions of Pink School were noted as being well organised and efficient. The school's grounds were immaculate and the staff room very tidy and carefully organised. A casual conversation with a stand-in cleaner/caretaker revealed they had called him in as the previous caretaker had been 'sent down the road' due to inefficiency . Observations of the principal's manner and discussions with staff also suggested that inefficiency or lack of performance would not be acceptable.

Red School's principal's (discussed below in 6.2.6) emphasis on high efficiency and clear communication worked well and provided an adequate challenge to the staff. Pink School (which also emphasised high efficiency and performance) was in contrast hard driving and many teachers indicated feeling overwhelmed, overburdened, anxious, powerless, discontented,

hopeless and unable to cope. Two different teachers stated their views on the principal's demand for efficiency and high performance:

> "You just have to be efficient and on top of things to cope here. I manage by planning ahead as much as possible and not leaving things to the last minute, but I don't know how long I want to be in this type of environment, it's stimulating but totally exhausting and near the end of term we're like zombies".(Sp/T)

One young teacher stated:

> "P puts too much too much emphasis on children's assessments and then there's also the endless paperwork. I don't know how the older teachers manage. I feel so tired and drained at times, I get stress headaches and my syndicate often has to carry my load". (Sp/BT)

While the principal demanded efficiency, she also showed a strong need to be in control and be aware of everything happening throughout the school. One teacher stated:

> "She doesn't ask to see work plans or anything like that. She's through all the time (wandering in the classroom) and she picks up by osmosis what's going on rather than sit down and watch you take maths sort of thing. She is aware and does keep herself informed as to what we're doing and what's going on". (Sp/T)

Pink School's hard driving emphasis on efficiency and performance appeared to contribute to many teachers feeling overwhelmed and discontented.

Workload, Role Ambiguity, Expectations and Autonomy

Observation, journal notes and three out of four interviews indicated that the Pink school principal was a 'hard driving principal' who had high expectations and requirements in every area of teaching. A major part of these requirements was the endless paperwork, a by-product of accountability measures from *Tomorrow's Schools*. Although all four schools were required to provide more records of children's achievement, it was mentioned by staff in Pink School and by teachers from other schools known to the researcher that Pink School's requirements were excessive. Indeed

almost all complaints included discussion of the excessive amounts of paperwork, which contributed to work overload and emotional exhaustion in many teachers. Evidence of this pressure to keep up with the workload, came from a teacher talking about the paperwork:

> "You have to constantly keep up with the records, and the reports that we have done recently have been horrendous. I have been working night after night and weekends working through it... the booklets which record everything the child does, I have to fill in 35 booklets, and it takes hours and hours of time to fill them in, parents only see it twice a year, in many ways its just a total waste of time". (Sp/T)

Many teachers revealed that to keep up with the workload they worked at night, during lunch times and at weekends. Two teachers stated that they got so exhausted they were near collapse. The deputy principal and three other teachers mentioned they had thought about leaving the profession. Another factor that came up in relation to workload was the expectations from management. One teacher stated that "the standards were extremely high", and that the principal was very aware of everything that was going on. Another teacher talked about having to comply with strict regulations and that there was only one way of doing something (meaning the principal's way). This teacher stated:

> "Sometimes she is very petty. Everything has to be checked. A letter going home to a parent about their child, then it would have to go through her and she would check it through as to the way I put down something grammatically. I am quite capable of writing good English. I find things like that really petty and small minded". (Sp/T)

Another source of pressure frequently discussed were the high expectations from parents. All four interviewees, including the principal, expressed that parents attitudes and expectations were the most stressful part of the job. These teachers also expressed resentment over parents attitudes, who were mentioned as being nosy, interfering and critical. A reliever reiterated what appeared to be a common attitude of teachers, that parents should stay out of school and not interfere. One teacher said "they're not welcome here, we don't want them in the classroom". Further discussion revealed that there seemed to be a 'them and us' relationship between the PTA (friends of the school) and

the staff at Pink School. The principal also reiterated an incident about a woman on the PTA who 'was getting too much power and thought she could run the school'. This discussion highlighted the principal's feeling of being threatened and her need for a tightly controlled workplace.

Field notes suggested that there was a moderate level of autonomy, that teachers could make decisions in their classroom on a day to day level but this was also restricted because teaching in a variable space meant that when classes were joined together the teachers had to work together and often a teacher's lesson could be changed. However with major decisions there was very little autonomy, these would be tabled for staff meetings and predominantly made by the principal. When asked whether the deputy principal had enough autonomy in making decisions, the DP stated:

> "Yes and no. There's always the power of veto there, I guess there has to be. Day to day issues yes, it's not a big issue, but major decisions, yeah, it is very much you make recommendations rather than you make a decision". (Sp/DP)

Another staff member in discussing autonomy went on to state that self sufficiency could be looked at as a bad thing (in variable space schools):

> "If you go ahead and make your own decisions and do your own thing and to hell with everybody else, then what you've decided may well effect the other people that work right next to you, so it's not a healthy thing in some ways". (Sp/T)

When asked whether creative ideas are fostered, and could one try new ways of doing things, this staff member's reply was:

> your convictions to follow it through and push h"Yes, I feel you can, well I have, well so long as you've got the courage of ard enough, yeah". (Sp/T)

6. 2. 6 Red School - Administrative Environment

Leadership/Decision-Making and Efficiency

Red School had a principal who was young, appeared to be liberal, very well organised, decisive and well respected. Four out of five interviews and other conversations indicated that the principal was supportive, would help them solve problems without taking over, shared workloads evenly, was dedicated

to achieving a high performance and was very up to date in terms of knowing the latest research and legislation in education. Teachers stated that the principal had high expectations of his staff but would help facilitate this by sending teachers on courses or having speakers come into the school. Two views of the principal included:

> "I think they all respect him and think he's pretty good. He's very efficient, very good at organising and also good at getting on with people as well. Sense of humour. You can go and tell him anything or if you have a problem he'll deal with it, without trampling on people's feet". (Sr/T)

> "His style is exhaustive. He really believes in involving people and listening to people but we know the buck stops with him. He will accept the responsibility for something we have finally decided to do". (Sr/DP)

It was also clear in the observational notes that the principal was well organised and up to date on many issues including curriculum and technological change. As well as being up to date on education issues, the principal stated he was very concerned about teacher stress and during the study provided staff with a paper titled 'Take Some Time to Smell the Roses', in which he highlighted positive things happening in the school and suggested that it was important to reflect on all the good things in primary schooling.

All of the five interviews (including the principal's interview) and observation data revealed a mixed style of leadership when it came to decision-making. In general the principal's style tended towards a consultative leadership. The principal stated:

> "I will seek out the views and the support of key people in terms of ideas or ways of operating and then, following the consultations, will reflect upon their views, I'll then make a decision. There's a degree of collaboration in the way I approve of things depending on what it is that the decision is being made on. With certain issues, like health and safety, I'm an autocratic leader and I'll make a decision and I expect it to be carried out". (Sr/P)

The staff at Red School appeared to be happy with the way decisions were made, by syndicates, team leaders and the principal. As stated by a teacher in Red School:

> "I wish to be consulted about some things that effect me directly but I'd rather not be concerned with everything else". (Sr/T)

The principal was also described as a business man, who was "trying to climb to the top and make his mark". Despite this, it appeared that his working style and knowledge were perfectly suited to the requirements of *Tomorrow's Schools* which emphasised high student performance, accountability and school effectiveness.

Along with having high expectations of staff, the principals also expected staff to be efficient. This was instilled and supported by senior management who provided clear guidelines, good planning and appropriate goal setting. Examples of efficiency mentioned by participants included the principal telling staff before planning meetings to bring their diaries so they could write in all the dates for the term's activities, sending staff on courses and having speakers come to the school. The provision of handouts outlining specific issues regularly given out to staff and discussed in staff meetings were also helpful aids to efficiency. Two participants discussed efficiency:

> "The principal is super organised and efficient, he's businesslike and he doesn't muck around and doesn't let meetings go off track. He certainly doesn't waste time talking about incidentals or your home life, unless its related to the issue you're discussing". (Sr/T)

> "Y, my syndicate leader, she is very good about eliminating unnecessary work, she doesn't have a meeting if there is nothing to talk about, Y is very down to earth, very realistic and doesn't expect miracles". (Sr/T)

Although not discussed as a separate topic, efficiency was frequently mentioned in the field notes and by staff. For example, four out of five interviews mentioned that the principal was efficient and well organised. Although the researcher cannot state that this contributed to staff also being efficient, it certainly appeared from observations and field notes that having senior management and meetings which were clearly organised and well

planned assisted staff to be efficient in their own administrative work. Staff development was also mentioned in two interviews as being very helpful in learning new skills and keeping up to date with changes in the curriculum. Other strategies mentioned by three staff members included planning ahead, timetabling everything carefully and staying organised.

Workload, Role Ambiguity, Expectations and Autonomy

Having a high workload, with many things happening at once, and the continual paperwork were also mentioned as sources of stress at Red School. Many teachers talked about their personal ways of dealing with the stress of having such a high workload. Tactics included overeating, having time out, watching mindless television and bribing their children with sweets to keep them well behaved. Although stress was mentioned in all of the interviews and in many discussions at Red School, observations and three interviews stated that the stress was alleviated by the excellent organisation of the administration and that expectations were clear, and they knew what was expected of them. The deputy principal when asked to rate the level of stress in the school environment stated:

> "I think it's low stress because the expectations are clear and there's reasonable feedback, there are reasonable targets and there are reasonable resources". (Sr/DP)

It was repeatedly indicated in the interview and observation data that the principal had high expectations of his staff and senior management team. Again these high expectations were clearly stated, there was no ambiguity as to teachers' responsibilities or duties. Five out of five staff (including the principal) interviewed stated that their role and responsibilities were very clear. One teacher stated:

> "When he's (the principal) not happy he really lets you know. Its very straight and very upfront". (Sr/T)

Memorandums and staff meeting notes provided staff with clearly organised goals and staff development was regularly provided. Staff also talked about the syndicates as having a shared goal, or a shared vision and observational notes suggested a strong cohesiveness amongst staff which was hard to quantify but was noticed in the banter amongst teachers. There tended to be

less negative comments and more positive discussion with suggestions of improving matters rather than negative, derogatory comments. There was also much humour with cartoons placed daily on the school newsletter. As previously discussed, Red School principal used a mixed style of leadership that involved relying heavily on his senior staff and using a considerable amount of consultation and collaboration. In seeking out the views of staff, but also making decisions himself, he appeared to be effective in achieving a suitable amount of autonomy. As one teacher stated:

> "We have a considerable amount of freedom, in meetings we are always invited to say our piece and bring up issues. I have also been to discuss certain things in private". (Sr/T)

Observations of meetings at Red School revealed that teachers were not directly encouraged to be self sufficient, but were given many opportunities to make personal decisions. For example in curriculum matters, teachers would mostly work out their teaching plans as a team, but develop subjects and how they were taught based on their own ideas. As one teacher stated in a discussion:

> "You can't really work on your own as a teacher, you have to work as a team in your syndicate. Some teachers share resources and ideas more than others, but you 'get on' better if you share ... those that don't share don't really fit in". (Sr/T)

With major decisions there was a variable amount of autonomy in that these would be tabled for staff meetings or predominantly made by the principal and senior staff. When asking a junior whether she had enough autonomy in making decisions she stated:

> "Yes, it's fine. I mean I wish to be consulted about the things that effect me directly but I honestly don't know if I would want to be consulted over every little thing, people are never going to agree so there has to be decisions made, that 's what a principal is for". (Sr/T)

When asking this same staff member whether creative ideas are fostered, and could one try new ways of doing things, his reply was:

"Yes, of course, as long as it doesn't require vast sums of money or resources, senior staff are pretty keen to try new things". (Sr/T)

6. 2. 7 Blue School - Administrative Environment

Leadership/Decision-Making and Efficiency

The principal of Blue School had been in his position for eleven years and had a wide range of school experience. Five out of six interviews described his leadership style as a mixture of autocratic and collaborative. Two teachers interviewed classified the principal's style as conservative or 'old style', having tight control of how significant decisions are made and democratic with delegation used amongst senior staff. When discussing leadership style the principal stated that he has to 'get alongside members of staff or whoever I'm supposed to make a decision about'. The principal went on to state:

"I have to suss it out, get the facts and figures in front of me, and then I'll make a decision, and when I've made a decision that's it, so I guess a collegial decision is on a one to one basis. I'm not a person who makes a decision without having collegial input on big decisions. Day to day decisions I make all the time". (Sb/P)

Three out of six interviews and observation notes indicated that he was respected but that staff were wary of him. One teacher stated that "you could never be quite sure what he was thinking". Despite these views the principal had a warm and friendly manner, and the researcher felt welcome to participate in the life of the school. An interview with the principal revealed that he had taken on board the new ideals of *Tomorrow's Schools*. He stated:

"I've got far more autonomy under the new system than I had under the old system. I'm in charge of finance in the school, virtually, and I can plan what's purchased and what's not purchased. Within a certain realm I'm a decision-maker. I can employ staff. I can choose my staff which is a hell of a plus, it's a really good thing". (Sb/P)

As acknowledged by most people involved in education, *Tomorrow's Schools* has reflected a change in role for principals in particular. Interview data from Blue School's deputy principal, also mentioned that the principal's role had changed from being 'hands on', directly involved with teaching curriculum to that of an administrator or 'PR' person with less time involved getting to

know the children. The principal of Blue School was criticised for this in that he did not visit the classrooms or know the children. Two other staff members also talked about the principal as being the 'old style' who liked to have everything passed or checked by him and whose style was authoritarian but also warm and friendly. Three out of six interviews revealed that the female members of staff preferred to take problems to the female deputy principal who was described as the 'new style' of leader, very open, totally up front, honest and easy to talk to'.

The staff at Blue School appeared to be happy with the way decisions were made. Observations made at syndicate meetings note that they were collaborative, open, friendly and with humour often present. Decision-making was shared with teachers solving problems for each other although senior staff tended to have more authority.

Along with high expectations, there was definitely a performance requirement at Blue School. The DP stated that this was built into the teacher's job function and that teachers were expected to be efficient by having good work planning which was demonstrated especially in the junior classes by the children's work on the walls. Discussing this issue further the assistant principal stated:

> "Your effectiveness tends to show up, for example, all the people who teach in the J.1 area, their children have a six year net, that's a test. It measures what they're reading and writing. So there are patterns that emerge of what the children know and don't know, so there are some instances that measure how the teachers are performing and whether they're being efficient". (Sb/AP)

Efficiency was also instilled by senior management who provided support and guidance. One example of this support was from the DP to a first year teacher. The beginning teacher explained:

> "The DP goes through my planning twice a term, I bring all my planning and she goes through with me and she makes notes which are helpful and keep me on track". (Sb/BT)

Another teacher stated:

"Yes, were expected to be efficient and productive. I tend to ask for help, some people don't like to do this because they think that people will think they're not coping, but I don't. If I have any problems I always ask for help, I say 'I have this problem kid, what would you do?"(Sb/T)

Blue School's provision of standardising things like planning forms, so that they could be done reasonably quickly and easily, and keeping assessment evaluation to a concise standard were also helpful aids to efficiency. Although efficiency was not discussed as a separate topic, it was frequently mentioned in the field notes and by staff. For example, four out of five interviews mentioned that the principal was efficient and organised. The DP also stated that the principal had a 'good business head'. Although this school did not appear to be as organised and efficient as was Red School, it did appear that staff were clearly organised and knew what they were doing. Staff meetings were well planned, and the three attended by the researcher did not go over an hour.

Workload, Role Ambiguity, Expectations and Autonomy

As with the other three schools, the workload was high, with increased numbers of students in classrooms and ongoing assessment that kept teachers working after school hours and in weekends. Observation and field notes stated that teachers seemed to be very focused in their role. In their morning breaks and lunch breaks they talked about work and it appeared that their life revolved around school. Managing the high workload with good organisation was one measure advocated by the deputy principal. She stated:

"I try to manage my workload and one of the things I do and encourage the teachers to do, every day they carry boxes home from school and I say to them, "if you want a night off leave it at school, walk out with your handbag, you're perfectly entitled to go home without it. Because the trouble with taking it home is that you think that you should do it, that's a stress, so I say 'leave it at school, don't take it home! " (Sb/DP)

Blue School's senior staff also tried to make the work load lighter by standardising things like planning forms, long term planning formats so that they could be done reasonably quickly and easily. Management of assessment evaluation was also kept to a concise standard so that it was manageable.

The staff also all appeared to come from a similar socio-economic background. All were well groomed and reflected the stable, conservative atmosphere of the school. Observation, journal notes and discussions amongst staff indicated that the Blue School principal was not a 'hard driving principal', that he had high expectations and requirements from his staff, but they were reasonable. The deputy principal was to mention however that there was a definite performance requirement, but that it was not a pressure requirement. When discussing the expectations of her role the deputy principal stated:

> "P gives me enough release time to actually do the things I have to do. He does not have unrealistic expectations of what will be done. I mean I am meant to do things like liase with pre-schools and, if there is no time for it, he will give me half a day here and there to go out and do what I have to do. He and I have got what I consider to be a pretty relaxed working relationship. From time to time I'll overstep the mark and he will tell me I've overstepped the mark and that's ok". (Sb/DP)

Two junior staff also talked about expectations as being unspoken, that 'one picked up' as one went. They also stated that there were no open discussions about what was expected of them, although it was generally understood that one was expected to attend meetings, perform duties, stay after school and contribute to extra curricular events, for example. When asked about general expectations and taking on extra duties one of the junior teachers stated:

> "There's an expectation and if you weren't meeting that expectation you would be soon be told, or told and directed towards it. Yeah, its unwritten, you're directed towards taking two or three areas. If you don't , you'll be put into it on the pretext that you'd be good at it. This school's very conservative, there is no one that would dare challenge things like being late to school, or miss meetings, I really think you'd be out on your ear, but no one's ever done this". (Sb/T)

Role ambiguity was not observed openly. While there were unspoken rules or expectations in terms of duty or responsibility, when it came to planning, (subjects or themes) syndicate meetings were times when teachers could clarify requirements and go over teaching plans. Field notes showed that it was mostly the junior or relieving teachers who asked questions for help in order to clarify what was expected of them. Staff meetings and special curriculum meetings also provided guidance and assistance in areas of

change, for example, where new subject knowledge or teaching approaches were being implemented.

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Role ambiguity was not observed openly. While there were unspoken rules or expectations in terms of duty or responsibility, when it came to planning, (subjects or themes) syndicate meetings were times when teachers could clarify requirements and go over teaching plans. Field notes showed that it was mostly the junior or relieving teachers who asked questions for help in order to clarify what was expected of them. Staff meetings and special curriculum meetings also provided guidance and assistance in areas of change, for example, where new subject knowledge or teaching approaches were being implemented.

Blue School's principal, as mentioned previously, used a mixed style of leadership that was both collaborative and autocratic, and it appeared that staff had less autonomy than in Red or Green School. Field notes suggested that the principal was quite controlling and wanted to be informed of things happening in the school. This observation was confirmed by the assistant principal who reiterated that the principal liked to know everything that was going on in the school. The assistant principal stated:

> "You can make decisions, that's fine, and the principal never queries them, but he likes to see the bit of paper. If you want something, like a major budgetary thing, he really likes to see it all on paper for justification and I think that's pretty standard practice". (Sb/AP)

The deputy principal in her discussion of autonomy and decision making also made similar remarks:

> "There are some things that come top down, R will say "this is the way its going to be", and often it is because there are outside factors that influence it. But if it is at a syndicate level, what topics we're going to study, or where we want to go, what kind of headings we want to take, we do have autonomy, although its collaborative. Everyone has a say, we try and get consensus". (Sb/DP)

When asked if teachers are free to make their own decisions in the classroom, it appeared in fact that autonomy was quite high, the deputy principal stated:

> "At the beginning of the year, I ask for copies of teachers' timetables, and I check that all the areas of curriculum are there. In terms of curriculum only fitness and reading are dictated. Fitness is done in the morning, because it gets everybody out there. Reading is done at the same time so we can cross group, but really, within that parameter they can set their timetables to suit themselves". (Sb/DP)

Two younger teachers mentioned, in casual conversations with the researcher, that they had a considerable amount of freedom, that in meetings they were invited to bring up issues and in their classroom they could basically teach as they liked. Although teachers were not observed in their classrooms, Blue School's staff when observed in syndicate meetings were given many opportunities to make personal decisions. For example, in curriculum matters, teachers could suggest ways to develop subjects and how they were taught. One teacher discussed this issue:

> "R (the principal) lets us do our own thing. He never comes in the classroom, I think he's too busy, so, yes, we have a lot of autonomy, we decorate our classrooms as we please and arrange furniture how we like, but we still go by the curriculum guidelines and our syndicate leader oversees our planning". (Sb/T)

6. 2. 8 Summary: Administrative Environment

High and low burnout schools were distinguishable in terms of certain administrative environmental variables. The major differences are summarised below in Table 6.4 and discussed further in the discussion (6.3). Four individual tables (for each school) are also given in the Appendix (5) which provide Triangulation Checkpoints to assist in cross-validating the data.

Table 6. 4 Summary of Administrative Environment

Concepts	Green (HighB)	Pink (HighB)	Red(LowB)	Blue(LowB)
Leadership and Decision Making	Extreme laissez faire leader-ship, co-operative decision making. Lack of strong principal leadership Shared views, informal decisions made.	Extreme autocratic leadership Hard driving , little collabor-ative decision making. Lack of confidentiality and little delegation. Principal dictatorial and defensive. Decisions made prior to meet-ings.	Strong principal leadership. Strongly consultative, but on certain issues autocratic (e.g. safety, health). Well respected and well organised principal. Principal has sense of humour & highlights the positive. Clear role expectations and duties. Parents expectations reasonable.	Strong principal leadership, collaborative, autocratic & paternalistic. 'Old style , formal conservative type of leadership. Good planning Warm & friendly approach. Deputy Principal well liked & approachable.
Efficiency	Low efficiency, time Wasted getting group consensus Staff expectations unclear Lack of clarity due to vague rules & regulations principal's decision style 'woffly' School documents not succinct	High efficiency. Hard driving performance expectations. Teachers feel overburdened due to excessive assessments.	Principal very efficient & well organised. School high efficient. High efficiency supported by senior management. Syndicate leaders used helpful strategies	Principal efficient & 'good business head'. High efficiency & good planning expected. High efficiency supported by senior management. Syndicate leaders used helpful strategies.
Workload and Pressure	Very high, pressure Increased due to shared decision-making which causes time to be wasted & inefficent. 'Open plan' setting increased work load, more noise stress	Very high due to principal's incorporation of high levels of assessment, & excessive paperwork. Constant pressure to keep up. Competitive approach used	High workload but responsibili-ties shared evenly. Syndicates have shared goals & vision. Humour used to ease pressure. Clear expectations also help	High workload, but strategies used to ease load e.g. standardised planning to make staff efficient. Approachable DP helps stressed staff (time out)

Concepts	Green (HighB)	Pink (HighB)	Red(LowB)	Blue(LowB)
Role Ambiguity and Role Expectations	Roles defined reasonably well some ambiguity. Expectations not clear. Lack of feedback from principal. Principal' 'own' role expectations were unclear.	Very high expectations from principal and parents Teacher's role unclear at times. Role	Very clear role expectations and duties. Parents expectat-ions high but reasonable. Role conflict not so visible	Clear role expectations and duties. Parents expectations reasonable, but also critical at times.
Autonomy	Teachers had high autonomy Teachers used own initiative	Moderate autonomy in classrooms. Very little autonomy in school decision-making	Teachers had moderate auton-omy. Variable autonomy in school decision-making.	Principal needs to check all decisions. Teachers have auto-nomy in teaching. Collaborative autonomy in syndicates. Little autonomy in major decisions.

6. 2. 9 The Social Environment

Observational data and anecdotal impressions indicated some apparent differences in the social environment of the high and low burnout schools. Tension and interpersonal conflict seemed to be more apparent in the high burnout schools. More negative comments and discussions were found in the observational and journal data. Impressions were that low burnout schools exhibited more humour (Red School in particular) and this seemed to increase team spirit and unite staff. Senior staff of low burnout schools actively worked towards reducing stress in their colleagues and used strategies to alleviate stress. Support from administrative staff and other teaching colleagues was discussed as being helpful in reducing stress and providing solutions to problems. All four schools exhibited 'team spirit' and collegiality to some extent. Attitudes towards the parents, community, and the Board of Trustees also appeared to have an impact on feelings of well being. The following discussion provides a detailed examination of each school's social environment. Data and information are presented to illustrate contrasts between the social environments and to verify differences where these exist. An attempt has been made to triangulate the data through convergent evidence from interviews, observations and anecdotal information (Triangulation checkpoint data can be seen in Appendix 5). Results from the high burnout schools Green and Pink will be discussed first followed by the low burnout schools, Red and Blue. A

summary table of the social environment will highlight differences between the two sets of schools.

6. 2. 10 Green School - Social Environment

Interpersonal Relationships - Internal: Coworker Cohesion, Support and Conflict. External: Board of Trustees/Parents Community

Despite the co-operative style of teaching in Green School's open plan environment, field notes reveal that there was a lack of coworker cohesion, a lot of tension between staff and many social interactions were negative. One of the reasons for this may have been redundancies made a few years earlier due to falling child enrolments. At the time, four teachers were made redundant and all teachers had to reapply for their jobs except for senior staff. The process was handled in an open manner, which as stated by the principal, was 'the most harmful way of doing the process'. The principal explained:

> "I couldn't handle it, the staff couldn't handle it, none of us could handle it, it was the most stressful thing I have ever been involved in. Openly discussing staff's professional abilities was unfortunate. It cost us people on the Board of Trustees and it's left a bitter mark". (Sg/P)

The principal went on to say that, "this experience had caused a 'thieves mentality' in that everybody was defensive about what they did". Journal notes about a long term reliever in his fifties, who had been one of those made redundant from Green School, mentioned that he had found it difficult getting a permanent position and this caused him much distress. This incident is likely to have left a bad feeling in the school and to have contributed to the tension and negativity that was observed on different occasions.

Certain teachers tended to have negative interaction patterns. For example, one teacher often tended to be aggressive towards the younger members of staff, stating that teacher training was no good and that "these new teachers have no classroom experience". There was also open hostility towards the principal shown by two members of staff on one occasion and, while the reasons for this behaviour were unknown, it later became clear from discussions with staff that a few members of staff thought he was a weak and ineffectual principal.

Two out of four interviews stated that, there were difficulties between staff members and that there were 'cliques' involving those that liked and were supportive of the principal and other 'cliques', which involved the assistant

principal, who were critical and disliked the principal. Observation data also revealed that there were also cliques involving those who got on well together, being of similar age, and other 'cliques' involving staff who worked together in home groups. Team spirit and coworker loyalty were observed within syndicate (home group) meetings where teachers offered to share resources and help others out. One staff member however stated that the team spirit in the school was "quite apathetic".

Because of the nature of open plan teaching operating, with two or three teachers sharing a larger group of children, field notes suggested that it was essential for teachers working together to assist one another, cooperate closely and 'get on well together'. However, as one beginning teacher who was paired with a much older and experienced teacher explained:

> "Because I'm a beginning teacher, we always have to do it J's way. I've learnt heaps from her, but I just want to teach my own class. It's become a power struggle, and she's always wandering over and checking on my children and we're not getting on so well any more. You really have to support one another with open plan teaching, and I think I'm more suited to teaching on my own... I've applied for a job at 'S' School, I've got an interview next Wednesday." (Sg/ BT)

Three out of four staff interviews also revealed a lack of coworker cohesion between staff at Green school. When asked about socialising out of school hours, two out of four interviews said that they did not socialise with other staff at work, but attended social functions. Discussions with two younger female teachers also revealed that there were definite cliques:

> "There's an older group who go out together, and there's one or two from Nikau (home group) who are friends and socialise together. But, generally, most of us don't socialise together except for school events." (Sg/T)

All four interviewees at Green School mentioned that there were good interpersonal relationships with parents and the community. The principal also repeated a number of times that parents were welcome in the school and could discuss any issues with him. A number of discussions between staff mentioned the positive nature of parent-help and the contribution they made. The principal's 'open door' policy, with parents being very welcome in the school, is likely to have engendered support and goodwill from parents and community.

This consultative aspect of shared learning between parents and teachers, although time consuming and emotionally demanding, led to many staff members stating how supportive parents were and that 'we couldn't do it (teaching) without them'. One junior staff member stated:

> "Parents are so supportive here, they are a great help, I really need an extra pair of hands and it means you can get to spend time with those who need it and especially in art for example, you couldn't really do some of the art work unless there were helpers. "(Sg/T)

The open plan set up of the classrooms provided a suitable atmosphere which made it easier for teachers dealing with parents. As Green School was situated in an area where many immigrant Asian families were settling, it provided two support networks targeting ethnic minorities and new families which aimed to foster good social relations between the community and the school. Green School also provided cultural events such as the fish and chips forum and a garden party which also helped to foster good relationships between staff and parents. The fish and chips forum apart from providing a fun social gathering for parents and their children, also gave parents, Board of Trustee members and staff an informal forum where issues such as changes needed for the following year could be discussed. Data from three out of four interviews mentioned that 'home groups' were generally supportive, however there was noticeable friction among some working groups. The burnout dimension of emotional exhaustion was observed on a number of occasions in the home group meetings. Teachers talked about their tiredness, exhaustion, their feeling of being unable to cope and longing for the holidays.

The staff's relationship with the Board of Trustees was not well developed. One interviewee stated that, "they really didn't have much to do with the Board", and two interviews did not discuss the relationship. Another teacher did state that the relationship with the Board of Trustees was 'very open' and 'very positive', however this staff member had only been teaching at the school for nine months. The principal stated that staff were quite defensive with regard to the Board of Trustees because of the past process of staff redundancies where teachers jobs had been at risk.

Data gathered during the school site visits showed that interpersonal conflict at Green School was apparent. Field notes recorded at least six occasions where verbal conflict occurred. The principal used pacifying, conciliatory techniques to deal with conflict, which worked reasonably well, but certain staff reported that they remained angry and defiant. When asked about handling conflict within staff, the principal replied:

> "It is not handled by trying to put me as piggy in the middle, that doesn't work and if I sense that is happening... well if two people come to me individually and say the other person is not co-operating and so on, well, there is only one thing to do and that's to bring the problem together and put it in the middle and see if we can sort it out in that way. That has been reasonably successful on one or two occasions". (Sg/P)

Impressions gained during tense occasions were that they generally occurred during busy times of the year when staff were feeling tired, overwhelmed with the amount of work and under pressure with time constraints. Two instances of conflict observed during a school site visit, were (a) during a staff meeting when deadlines for assessments where being placed on teachers, and (b) when discussing workloads and the amount of paperwork that needed to be attended to. In the second instance, the researcher felt uncomfortable putting further notices in the teachers' mailboxes requesting participants for interviewing. Two teachers expanded on the issue of conflict:

> "Oh, there are the same few teachers who speak out, but I think they just get frustrated with (the principal), we should have more warning about deadlines for things and they just feel overworked and fed up". (Sg/T)

> "At certain times of the year (about six weeks from the end of term) the amount of conflict escalates here. I think the principal handles it really well, although I wouldn't take it if I was him. Staff can be almost abusive at times, I think, because they know they can get away with it". (Sg/T)

An interview with the assistant principal also confirmed a substantial level of conflict and tension amongst staff. The assistant principal appeared very organised, efficient and concise in her manner and her office appeared very tidy and organised. Her dress was immaculate and she gave an impression of being very efficient. This personal style would obviously have clashed with the

principal's and, when asked about conflict, she revealed that she did not 'get on' with other members of the senior staff and stated that she preferred a 'stronger, more direct principal' and that she felt more stress because her ideals were not being met. The assistant principal also stated her preference for single cell classrooms instead of the open plan classroom (which lends itself to more noise and disorder).

Informal discussions with staff revealed that there were a number of reasons for tension in the school apart from management and organisation. One teacher reveals extreme stress in her personal life:

> "My son has had a motorbike accident, he's in the spinal unit. I'm holding on, merely hanging on by a thread. Its my first year in this school and I can't take much time off. I 'm also moving house, T is helping and supporting me which is a real help". (Sg/T)

Overall, Green School's social environment revealed a lack of coworker cohesion, with tension and conflict evident between some members of staff. Despite this, support and team spirit was evident in home groups, and social groups. Parent and community relationships were fostered and welcomed into the school and correspondingly a lot of support was given back to school.

6. 2. 11 Pink School - Social Environment

Interpersonal Relationships -Internal: Coworker Cohesion, Support and Conflict. External: Board of Trustees Parents/Community

Initial observations of staff meetings revealed a moderate level of coworker cohesion, with participants being friendly and supportive of one another in external conversations. However, interviews and private conversations with staff revealed a lot of tension and dissatisfaction, mostly related to the principal's leadership. Two senior staff members talked about internal relationships, with differing views:

> "I don't like working in a situation where I'm not valued for my views or my input. Why do they take no notice of things when I make suggestions? Why am I not able to make a decision in my department ? People moan and grizzle about decisions made by the principal and L, but no one ever complains about it, because they're scared, there would be repercussions". (Sp/AP)

> "I think we're reasonably cohesive, socially we seem to be reasonably successful, professionally we get on reasonably well, as a corporate group it tends to split

into factions simply because of the geography, I mean each syndicate becomes a little power group and in a school like this its hard to work across syndicates. There are frictions there all the time, staff that upset others, one member in my team for instance is good at antagonising other people and getting under their skin, but she probably puts in more effort than anyone else". (Sp/DP)

Team spirit was often observed in syndicate meetings where teachers would work on problems together. One teacher summed it up when she stated:

"People try to say that there is team spirit but if you honestly said would you like to go away and live together in the community? No, no they're not the best buddies, but they will certainly front up to a function once a term or once a year, and they come to breakfast meetings and things like that and they're all very nice people, but it ends there". (Sp/T)

When asking about relationships in the school, two out of four interviewees said they were wary of talking about it and had to be assured of confidentiality. The researcher also noted that junior staff were not trustful of senior staff and felt unable to confide in them and reveal their problems: One older staff member explained:

"If I could give three things to help improve the principal's relationship with staff it would be, 'value people and look for qualities in people', there's only negativity here. Here if you do anything wrong, you hear about it and within seconds its passed around, what do you think of that?" (Sp/T)

Teachers' views were varied about external relationships with in Pink School. The tendency was for teachers to perceive parents as nosy and interfering. This concern was expressed in all four interviews (even the principal's). One teacher also mentioned the fact that teachers were scared to have parents in the classroom because 'others' would not approve. Two comments reveal this attitude:

"The parents are quite supportive, although their (the parents') expectations are very high and they can be extremely interfering and pushy even to the extent of phoning staff at night".(Sp/T)

> "Parents in the past have been good, but we're losing them, they're going away and sometimes we really need them. Everybody here says 'typical', but if they had been given that welcoming feeling, they would probably stay, but they haven't". (Sp/T).

Linked to this dissatisfaction of parental influence was the repeated notion of support. Four out of four interviews and field notes data revealed that teachers did not feel supported by parents or the community. The deputy principal when discussing these issues stated:

> "One of the main changes in society is parents' expectations of the schools and parents' lack of support. More and more parents see themselves as education experts rather than the teacher, and more and more people are inclined to back the child at the expense of the school first and then go and ask questions or make demands or what-ever . I certainly don't feel respected or valued as a teacher in the community". (Sp/DP)

The deputy principal also mentioned that those parents involved in the school are often ardent supporters of education, whereas, parents that are not involved in the school and do not see what goes on, tend to knock or criticise teachers and the system. The discrepancy between the school's attitude of not wanting the parents in the classroom and seeing parents as nosy and interfering was likely to have engendered the above situation, where there was a perceived lack of support and criticism placed on teachers. Another teacher stated that teachers today do not have the same respect, and are not considered professional, like doctors or lawyers.

Thus most teachers at Pink school perceived that they were unsupported by parents and felt that parents held too high expectations. Teachers, however, found support within their syndicate groups and the shared planning of lessons helpful. Observational notes showed that there were clear roles or duties expected of staff and teachers seemed aware of their responsibilities. It was unclear whether extra responsibilities were fairly distributed, but teachers clearly knew that they were accountable, not only to the children, but to the parents, senior management and the board of trustees.

Unlike Green School, which actively promoted community involvement in the school, Pink School, while instituting a parent association and parent morning teas, did not appear to encourage a close relationship with the community. A

discussion with one staff member revealed that there had been a couple of incidents with the community where there had been a confidentiality break and things had 'got out of hand'. As a consequence of this, there was an increased mistrust of 'others' not directly related to the school. During the school site visits, the school was broken into and money and equipment was stolen. It was the second break-in in recent months and thus likely to have contributed to the staff's feelings of mistrust and wariness. One teacher discussed this further:

> "It's really rotten being broken into, and all the money from the show taken. It must be someone who was aware of the show and the money being left in the principal's office. People think this school is well off, cause it looks new, but it's not. It's really lousy". (Sp/T)

Staff's relationship with the Board of Trustees was not well developed. Despite this, a few comments were made about the Board. One included feeling under pressure from their high expectations, and that the Board had too much power. Another comment from the deputy principal included:

> "There's not a lot of pressure directly from the Board, but you are aware that your responsible to an immediate school body, whereas they are the people that hold the purse strings and you're much more accountable in terms of selling an idea to them, to budget it, to find it, to make it work kind of thing, and they are often a vehicle for parent disquiet, parents will write a letter to the Board about what's been going on, which is really kind of underhand". (Sp/DP)

These feelings were expressed in three out of four interviews, and contributed to negative interpersonal relationships. The field notes were saturated with comments and discussions about conflict between the principal and her close ally. The tendency of the principal to publicly criticise individuals also caused much resentment and unspoken negativity. Two pertinent comments about conflict were spoken when the interviewees were reassured about confidentiality:

> "Many of the staff are very unhappy about being here, but it's mostly unspoken because staff are too afraid to speak out. There's so much conflict between certain individuals, we just stick to our syndicates groups and help each other". (Sp/T)

"Conflict is quite high between certain individuals, most of us just go with the flow, act like good followers (laugh) and get on with our work. But there is conflict with a few (Fl and Al), and R also takes a bit of flack, but he's a male and gets away with it". (Sp/BT)

Overall, Pink School's social environment revealed moderate coworker cohesion, with tension and conflict evident particularly in regard to the principal's leadership style. Despite this, loyalty and team spirit was evident in syndicates and social groups. Parent and community relationships were not fostered and were perceived as interfering; correspondingly, there was little support and high expectations from parents.

6. 2. 12 Red School - Social Environment

Interpersonal Relationships - Internal: Coworker Cohesion, Support and Conflict. External: Board of Trustees Parents Community

Coworker cohesion and team spirit were high at Red School. Despite being told there was an "in clique", which included those that "got on" with the assistant principal, and a "not so in clique", staff at Red School were friendly and generally talked positively about one another. Casual conversations with staff in all four schools indicated that there were 'in groups' or groups of people who got on well together often socialising outside school, and that there were those individuals or groups who were not accepted or were disliked by certain members. This was also the case at Red School, where the deputy principal was disliked. Three out of four interviewees discussed how the deputy principal was 'tolerated', that he did things that got up people's nose and that staff were hoping he would leave. Despite this, the atmosphere in the staffroom was (as previously mentioned) cohesive, and there was a lot of positive discussion and humour.

Three out of five interviewees talked about the syndicates as having shared goals and a shared vision. Observational data showed there to be a strong team spirit within the school as a whole. This was shown for example by enthusiastic cheers when the school did well at the swimming competitions, a large show of hands volunteering to make poster displays for the school play and loud claps of support for two female staff who completed a triathalon. The fact that there was strong administrative support, and positive statements were verbalised, appeared to have a trickle down effect, inciting the rest of the staff to focus on the positive. As mentioned previously, teachers appeared content and happy to be working at Red School.

Administrative or supervisor support featured highly in observation and interview data. Four out of five interviewees perceived that teachers felt supported by their principal. The deputy principal when discussing leadership and decision making made comments such as "we are heading in the same direction' and 'teachers like being here and want to be here". These cohesive type of comments were also heard in the staffroom and were commonly featured in the field notes. Support and guidance from the principal in curriculum development was also mentioned by two teachers as a strong feature of his leadership. The principal also stated that he got support from a network of principals and senior management friends, (he showed the researcher six phone numbers on autodial) whom he knew very well and if he needed some advice or to 'sound off', they were there at the end of the phone.

Loyalty and confidentiality were two themes that came up frequently in the field notes and interview data. Five teacher interviewees (including the principal) discussed the importance of loyalty and confidentiality in the school. During the principal's interview he stated:

> "Confidentiality is paramount. If teachers ask for something to remain confidential,but by virtue of them coming to share it with me, my assumption is that in 99% of the cases, they want me to be involved and helping them with a solution. However if hey say "its confidential, I'm just letting you know that there is a concern", then I'd say "hat's fine, and it wouldn't go out the office". (Sr/P)

Although loyalty was not directly observed during visits to Red School, teachers would often mention positive attributes of their fellow colleagues and encourage one another in syndicate and staff meetings. It also appeared that the positive, constructive attitude of the principal rubbed off on the staff. One older teacher who had seen two principals at Red School stated:

> "There's been a big change since P came to Red School. There's a better feeling, teachers are not so judgmental or critical as with the last principal. P is very positive and tries to get us to make constructive changes that will help us, he's not Mr Nice guy, but you know he's doing the best he can for us and that he'll always support you if you get into trouble with parents". (Sr/T)

The relationships of staff with the Board of Trustees for non administrative staff appeared to be satisfactory and not antagonistic. Three out of four interviewees provided information. One indicated that she knew who was on the Board and that while the Board was quite active within the school, she didn't have any formal meetings with them, but that they were good and nice people. The second interview, given by the deputy principal, stated that the Board was "just part of the service", and the school had excellent people and that he had a lot of Board of Trustee's kids in his class, and that the parents were friends. The principal's comments about the Board were more specific:

> "The BOT has a really positive effect on me in that they are really skilful and experienced people. I mean the finance committee chairwoman is an accountant, the board Chair is an engineer and there's a barrister/solicitor, so they have expertise that they bring to the school. They're all second termers so they've got a handle on the realities of their role". (Sr/P)

Relationships with parents, when discussed with teachers, were generally positive. Obviously some staff members had difficult parents to deal with, but as the DP stated, 'parents are welcome in the classroom as long as they behave in an acceptable manner'. Further interview data revealed that many teachers thought that " parents tended to be critical". Four out of five interviews revealed that they felt respected by the community. One teacher stated:

> "I do feel valued and respected as a teacher in the community and I've been lucky to be involved with parents. We get so much help and support from the community". (Sr/T)

Observational and anecdotal impressions indicated that conflict within Red School was low. Field notes frequently mentioned the team spirit and positive atmosphere of the school. Three out of five interviews revealed that the deputy principal was generally disliked and "tolerated" and that the assistant principal had "favourites" who did well in the school, but despite this information and some general discussion of back biting and cliques, most of the staff talked positively of the staff and school overall. The fact that senior management were consistently mentioned as being "fair, consistent and supportive", also seemed to influence the positive nature of the work environment.

Conflict within Red School tended to be attributed by staff to work pressure. This pressure had multiple causes including high numbers in classroom, few

relievers, deadlines, curriculum changes and disruptive children as examples. Three out of five interviewees discussed work pressure or work overload as being the causes of conflict. Conflict from negative interpersonal relationships was rarely mentioned in interviews, although annoying features of the deputy principal and certain individuals were raised. Two pertinent comments about conflict included:

> "The principal has the ability to listen to both sides of a situation and be objective and 'fair' to both parties. He'll be very supportive and try and get both parties to reach a fair solution". (Sr/T)

> "I think there's quite an emphasis on the positive here, and humour. The principal loves to have a laugh and I think that always takes the heat out of things. Also the senior staff (apart from the AP) are helpful". (Sr/T)

Overall, Red School's social environment revealed high coworker cohesion, with positive interactions frequent and evidence of collegiality amongst members of staff. Support and team spirit were evident in syndicate groups, with shared goals and vision apparent. Parent and community relationships were perceived positively in general although some staff considered parents to be critical.

6. 2. 13 Blue School - Social Environment

Interpersonal Relationships - Internal: Coworker Cohesion, Support and Conflict. External: Board of Trustees/Parents Community

Coworker cohesion appeared to be high at Blue School. Despite the principal being described as conservative, authoritative and 'old fashioned' in his approach, there was still a cohesive, supportive atmosphere. Observations from three syndicate meetings, for example, showed strong cohesive team work with most members contributing ideas and comments. Also, on two occasions at weekly staff meetings, staff members were observed volunteering to do extra duties related to sports events. Three out of six interviews mentioned, however, that there was dissatisfactions with senior staff, particularly the assistant principal, but these same interviewees also discussed the positive, helpful nature of the deputy principal, saying how supportive and kind she was. Many casual conversations also relayed how supportive and helpful the deputy principal was and this is likely to have had a strong beneficial effect on staff morale. Team spirit was very visible during social and sporting events. Some examples of these included a special morning tea and thanks from the principal for the caretaker

who was leaving, loud applause for Japanese guests who visited the school, cheers and thanks to the swimming team who did poorly at swim competition and wild enthusiasm from staff betting on the horses on Melbourne Cup day. In an interview with the deputy principal she described the atmosphere of the school:

> "There's a lovely atmosphere at the school, it starts off with J at the front desk who has been here forever. She is extremely welcoming, people who come to us always say how lovely she is, she sets people at ease". (Sb/DP)

When the principal was asked about the internal relationships his comment provided a different perspective. The principal stated:

> "Oh hell, at times hilarious! I think the staff know that even if everyone's diverse, everyone's got their own ideas. Staff get on very well together and I've got to foster that and my senior staff have to foster that, it just doesn't happen, it's part of the school tone". (Sb/P)

It was not clearly apparent why Blue school was a 'low burnout' school, but a supportive climate and certain factors such as standardising forms to make them quick and efficient emerged through discussions as teachers opened up. Part of this supportive climate was the personality of the deputy principal. Three out of six interviews and many casual conversations indicated that the deputy principal was "very supportive", that "you could go to her with any problem" and that the deputy principal "could be counted on to stick up for her staff, helping in numerous ways". Further interview data revealed that the deputy principal used certain strategies to help teachers. For example, whenever she had any teachers' hours up her sleeve, she would release teachers in rotation for the afternoon, giving them non-contact time to do administrative work that was expected as this reduced stress in the classroom. Another strategy that the deputy principal used to help other teachers was explained:

> "If a teacher is under stress, you know because it echoes. So, if a teacher's voice goes up really loud, you actually hear them outside and you know. Sometimes I wander over and say, "I've got half an hour to spare I'll give you a break". (Sb/DP)

As well as having "very good support from the top", one Blue School teacher explained that teachers next door to each other generally know if the person next to them is having a bad time, because they will talk about it and help each other. One male teacher stated:

> "You don't feel you're on your own, you can ask for help here and you get it". (Sb/AP)

Teacher support was also observed in a number of situations, for example, following up another teacher's reprimand of a child, sharing resources and offering help with sporting events:

> "During lunch R came in and asked if anyone would be interested in watching the netball teams playing - Tony would appreciate some support. A few teachers said they would and left with R". (Sb/T)

Support from parents was mentioned in four out of six interviews as being helpful and that two staff interviews mentioned that parents expectations were not too high. When discussing the parents of Blue School one teacher stated:

> "It depends on the parent, it depends what you have to say to them. I've been in someschools where the parents are just horrendous but the parents here are brilliant. I don't find them stressful at all". (Sb/T)

Casual conversations overheard in the staff room at Blue School were mainly friendly and mostly work oriented. As with the other schools, there were individuals and groups who got on well together and sat next to each other during breaks. As time went on it also became clear that certain individuals were not so popular and disagreements were raised. One first year teacher stated that when the principal was away (overseas) everyone was a lot more jovial and less tense.

The relationships of staff with the Board of Trustees with teachers who did not attend the Board meetings were unknown. The researcher's attendance at one of Blue School's Board of Trustee (BOT) meetings revealed an extremely difficult and tense situation. Both the school's acting deputy principal and assistant principal were competing for the job of deputy principal and there appeared to be an extremely antagonistic relationship between the chairman of the board

and the principal. The principal when discussing the relationship with the BOT stated:

> "I think at times the BOT is pretty unfair. At times I think a lay person on the board knows very little about education within the school and that infuriates me, I try to understand it ... yeah every board meeting causes me stress. Its just a diverse matter of opinion at a board meeting that worries me, and I have to say my piece". (Sb/P)

Relationships with parents were generally positive and, in keeping with Blue School's semi-formal traditions, parents are advised in the school prospectus that they were 'welcome at any time to make an appointment with their child's teacher to discuss progress or voice special concerns'. Similarly to Pink School's teachers, two out of six interviews stated that parents expected too much and were critical at times. Two comments included:

> "We've got really nice parents, they work really hard for the school and we appreciate what they do. It's nice that the bulk of them appreciate what we do. Because we involve the parents with the school quite a lot they tend to be aware of he workload, so its pretty good". (Sb/DP)

> "Most of the parents are middle management people. Most of them have mortgages. Most are looking at good colleges and good Intermediates. Their expectations are high and they expect their children to do well. If they don't do well, they're down here like a ton of bricks to see why or why not. There are many magic parents around here as well but on the whole they have high expectations". (Sb/P)

Further interview data revealed that when staff worked with parents in PTA functions, they worked with them 'pretty well' but staff felt that parents could do more to help. Field notes discussing observations of parents and teachers were limited, and did not provide further data.

Four out of six interviews revealed that they felt respected by the community. One teacher found it hard to answer and stated:

> "Yes, I think I do feel valued. Gone are the days when the teachers was miles high up in the air in local standing. That doesn't happen nowadays. I think I have a reasonable good standing in the community, yeah I think I feel valued,

but its a good question because who can judge? Can you judge yourself? We don't get much patting on the back but when it does come it's nice". (Sb/T)

Interpersonal conflict at Blue School was low. Field notes recorded extreme tension and conflict in a BOT meeting but in staff and syndicate meetings little verbal conflict occurred. Again, it was observed that there were cliques of individuals based on age who associated together and general observations did not record any significant conflict. Although many teachers showed signs of tiredness and at times disagreed with other staff there were no outbursts of anger or extreme negative emotion. The principal when asked about conflict between staff said:

"No, there hasn't been as far as I'm aware. There may have been disagreements at times, but that's good, that's healthy, but there's never been any conflict as far as I'm aware for years". (Sb/P)

On teacher who had only been teaching at the school for one year stated:

"I don't really know about conflict, I haven't noticed it. I guess people don't talk to one another. I guess if you have a personality clash you probably don't gravitate towards that person. I guess in a bigger staff it's easier to avoid someone, sit somewhere else". (Sb/BT)

Overall, Blue School's social environment revealed high coworker cohesion and a cohesive, supportive atmosphere. Strong teamwork and team spirit was evident in syndicate groups. Parent and community relationships were perceived positively and parents were welcomed into the school. Staff were critical of parents at times and perceived them to be critical. Blue School appeared to be efficient and used good planning strategies. Autonomy was discussed as low with regard to school decisions and moderate in teaching. Little conflict was evident.

6. 2. 14 Summary: Social Environment

High and low burnout schools were distinguishable in terms of certain social environmental variables. The major differences are summarised below in Table 6.5.

Tables 6. 5 Summary of Social Environment

Concept	Green (HighB)	Pink (HighB)	Red(LowB)	Blue(LowB)
Interpersonal Relationships *Internal:* **Coworker Cohesion**	Many negative interactions aggressive comments, hostility & defensive actions shown Interpersonal difficulties between staff Little school team spirit, but loyalty support shown in syndicates. Little socialising outside sch.	Moderate coworker cohesion, many positive interactions Tension/dissatisfactions due to overbearing leadership. Dissatisfaction among senior staff and syndicates, defensive comments. Support & loyalty in syndicates. Staff don't trust senior staff or principal	High coworker cohesion. Many positive interactions DP "disliked & tolerated". Syndicates had shared goals & vision. Strong admin support. Strong team support and loyalty in syndicates Teachers appeared happy & content.	High coworker cohesion. Cohesive, supportive atmosphere. Some staff disliked AP. DP perceived as supportive, helpful and liked. Syndicates have strong teamwork spirit visible. Principal fosters good relationships.
Support - Principal - Senior Managemen - parents	Principal supportive but does not solve problems, and not enough action. Very good support from parents. Some friction among home groups.	Lack of support from principal and senior staff. Lack of support from parents. Syndicate teams supportive of each other.	Principal very supportive of staff and listens. Helps staff to sort out problems. Strong cohesiveness among staff. Support & guidance key feature of school. Loyalty & confidentiality high.	High support from senior staff & principal and use of helpful strategies to assist staff. Good support from parents.
External: **Board of Trustees/ Parents/ Community**	Positive interpersonal between parents & community Parents supportive & helpful. Parents welcome in classrooms. Principal available to parents Consultation with parents & community fostered. Staff relationship with BOT unclear, principal says staff defensive of BOT	Parents perceived as interfering. Parents' expectations high. Parents not welcome in classrooms. Principal available to parents. Mistrust of community. Staff relationship with BOT unclear.	Parents perceived positively. Parents welcome in classrooms. Principal available to parents Teachers perceived parents to be critical Staff relationship with BOT satisfactory. Principal saw BOT as positive. Teachers respected by community.	Parents perceive positively but critical at times & have high expectations. Parents welcome in classrooms.Parents & staff work well together fo functions. Principal's relationships with BOT chairperson an tagonistic & tense. Principal saw BOT as unfair at times. Teachers felt respect

Concept	Green (HighB)	Pink (HighB)	Red (LowB)	Blue (LowB)
Conflict	Visible. Conflict of working styles among senior staff. Collaborative decision making approach contributed to staff tension	Conflict and tension visible. Conflict between staff	Low conflict observed. Humour of principa helped to deflect conflict.	Little conflict observed. Principal not aware of any conflict.

6. 2. 15 The Physical Environment

While section (6.2.1) provided a brief description and general impression of the physical environment for each school, this section provides anecdotal comments and interview data. The physical environment of all four schools was located in middle class North Shore suburbs having similar decile ratings. The qualitative data provided below presents a broad view of the school environment and also includes specific information in table form of the lighting, room temperature, amenities and workspace. This information was gained from interviews and discussions with staff. High burnout schools Green and Pink are presented first followed by the low burnout schools, Red and Blue.

6. 2. 16 Green School Physical Environment

Green school as stated previously, was situated in a quiet road and located next to an intermediate school. The playing fields were often shared for sporting events. The outside physical environment appeared moderately tidy. Litter was present and children's seating was chipped and needed painting. The surroundings were pleasant with nice gardens and trees, multiple playing areas and good carparking facilities for staff and visitors.

Most of the staff who commented on the environment perceived their physical surroundings contributed to a pleasant work environment. The school classrooms were generally light and cheerful. The open plan set up of Green School which included very large rooms that held two or three classes of children had both a positive and negative part to play in the physical environment. Most teachers who discussed the open plan set up stated that they preferred to work in this setting and cited benefits such as being able to rely on other teachers and that teacher strengths could be utilised and shared among syndicates. Negative reactions included that fact that "you couldn't close the door and have a bad day", that "we're in a fish bowl and everyone can see

what is going on". One senior staff member stated that open plan teaching was not as suitable for year one and two teachers because of the fact that they would be very visible so that they would have to feel secure and confident as a teacher. The table below highlights some staff perceptions of the physical features of Green School. The numbers in brackets relates to the number of staff comments about a specific aspect of the environment

Table 6. 6 Green School - Staff Comments on the Physical Environment

Environmental Factors	Evaluations
lighting	-very good (2) - not very good (4) -the colour & decorations make the place warm and cheerful to work in (3)
temperature	-rooms are well ventilated (4) - rooms are rather draughty (4) - rooms are not draughty (2) - gets too hot (4) - does not get too hot (2)
amenities/ workspace	- the work space is crowded 2) -the furniture is well arranged (5) -the school could do with some interior decorations (3) -the school has a stylish and modern appearance (0)

Note: Numbers in brackets refer to the number of individuals who made the preceding comment.

From this table summary it appears that four staff members perceived the lighting to be poor, the rooms to be well ventilated, but hot at times. Two staff members thought there was not enough work space, but that the furniture was well arranged. Three staff felt that the school needed interior decorations and no staff felt the school had a stylish or modern appearance.

6. 2. 17 Pink School Physical Environment

Pink school was situated in a quiet road and cul de sac near a new housing subdivision. Being a relatively new school, the buildings and grounds were in good order, clean and well kept. The surroundings were pleasant with nice

gardens and trees, multiple playing areas and views. All staff that discussed their physical environment perceived that their physical surroundings contributed to a pleasant work environment. The school classrooms were generally light and cheerful. Both the conventional use of classrooms and the variable space set up of Pink School enabled flexibility in teaching and physical set up of space and furniture.

Teachers who discussed the physical environment stated that they preferred to work in the variable space setting, citing benefits such as being able to rely on other teachers and that teacher strengths could be shared. Other comments included the fact that they could not have noisy classrooms, as it would affect others and that, working in a variable space, one had to get on with others. The table below highlights some staff's perceptions of the physical features of Pink School.

Table 6. 7 Pink School - Staff Comments on the Physical Environment

Environmental Factors	Evaluations
lighting	-very good (5) - not very good (1) -the colour & decorations make the place warm and cheerful to work in (4)
temperature	-rooms are well ventilated (5) - rooms are not well ventilated (5) - rooms are rather draughty (4) - rooms are not draughty (4) - gets too hot (5) - does not get too hot (1)
amenities/ workspace	-the work space is crowded (5) the furniture is well arranged (4) -the school could do with some interior decorations (3) the school has a stylish and modern appearance (5)

Of staff who discussed the physical environment, five perceived the lighting to be very good. Five staff felt the rooms to be well ventilated and five also found rooms were not well ventilated. Four staff found the rooms too draughty and

four staff stated that the rooms were not too draughty. Only one staff member felt the rooms got too hot at times. Five staff thought there was not enough work space, and four staff thought the furniture was well arranged. Three staff felt that the school needed interior decorations and five staff felt the school did have a stylish or modern appearance.

6. 2. 18 Red School Physical Environment

Red school was situated in a very busy corner of a main road with constant traffic passing giving off traffic fumes and noise. Before and after school road crossing supervision was therefore undertaken with much care and supervision. The school also sits on a high bank which makes it awkward to walk up to. It was an old school established in 1918 with the original building replaced in the late 70's by a flexible teaching space block. The remainder of the school including the staff room and principal's office has been extensively remodelled internally.

During this study, the principal was working on getting old areas redesigned to maximise space for teaching and administrative programmes and to make better use of resource areas and working areas. All staff who discussed their physical environment perceived their physical surroundings to be resonably pleasant, especially the renewed staffroom. Thus, apart from some of the older classrooms, the physical environment was a mixed one with quiet areas of shaded spots with avenues of trees, older areas since its earliest days with old concrete blocks and new areas under construction. The table below highlights some staff perceptions of the physical features of Red School.

Table 6. 8 Red School - Staff Comments on the Physical Environment

Factors	Evaluations
lighting	-very good (1) - not very good (5) -the colour & decorations make the place warm and cheerful to work in (0)
temperature	-rooms are well ventilated (2) - rooms are not well ventilated (4) - rooms are rather draughty (4) - rooms are not draughty (2) - gets too hot (4) - does not get too hot (2)
amenities/ workspace	-the work space is crowded (6) -the furniture is well arranged (3) -the school could do with some interior decorations (6) -the school has a stylish and modern appearance (2)

Five staff perceived the lighting to be bad and no staff thought the rooms were colourful or cheerful to work in. Four staff felt the the rooms were not well ventilated and were too draughty. Two staff however felt the rooms were well ventilated and did not get too hot at times. Six staff also felt there was not enough work space, and three thought the furniture was well arranged. All staff who discussed their environment felt that the school needed interior decorations and only two staff that discussed their physical environment felt that the school had a stylish or modern appearance.

6. 2. 19 Blue School Physical Environment

Blue school was situated in a quiet middle class suburb with recent subdivisions nearby. Being a relatively new school, the buildings and grounds included 2.5 hectares of land which was well kept and conservative in appearance. The surroundings were pleasant with nice gardens and trees and varied playing areas including two adventure playgrounds. The interior physical environment was generally perceived as being a pleasant work environment, but limited space was an annoying feature in both the classrooms and the staffroom. Some

classrooms were light and cheerful (generally the newer prefabs) and others were dark and cramped. The school's office, where people entered the school, had a display of past principals' photos along the walls which gave observers an historical view of the school, and provided an air of tradition and formality. Table 6.9 highlights some staff perceptions of the physical features of Blue School.

Of staff who discussed their school environment, three perceived the lighting to be good, and five staff thought the rooms were colourful and cheerful to work in. Six staff felt the rooms to be well ventilated, although two thought it got too draughty and hot at times. Six staff thought that there was not enough work space, and four staff thought the furniture was well arranged. Three staff members thought that the school needed interior decorations and two staff members thought the school did have a stylish or modern appearance.

Table 6. 9 Blue School - Staff Comments on the Physical Environment

Environmental Factors	Evaluations
lighting	-very good (3) - not very good (3) -the colour & decorations make the place warm and cheerful to work in (5)
temperature	- rooms are well ventilated (6) - rooms are rather draughty (2) - rooms are not draughty (4) - gets too hot (3)
amenities/ workspace	-the work space is crowded (6) -the furniture is well arranged (4) -the school could do with some interior decorations (3) -the school has a stylish and modern appearance (2)

6. 3 Summary Discussion

The following discussion provides a brief summary of the three environmental components arising from the data analysis, the administrative environment, the social environment and the physical environment. A summary of the high burnout schools will be discussed first followed by the low burnout schools.

High Burnout Schools

In the high burnout schools, the leadership style and the way in which decisions were made appeared to have a significant effect on the teachers. Both high burnout schools had clearly different and extreme leadership styles. Green School leadership was strongly collaborative, with decision making shared, and Pink was strongly autocratic, with decisions generally made by the principal. Green School clearly lacked strong leadership, which caused frustration amongst senior and ancillary staff. Green School's principal, with his 'caring and sharing' attitude, caused protracted decision-making and contributed to a lack of efficiency. Pink School leadership on the other hand, was extremely autocratic, hard driving and lacking in collaboration. Pink School's principal also displayed defensive actions and demanded 'hard', 'competitive' and 'measurable' school outputs. Thus problems with administration appeared to contribute towards much stress and dissatisfaction experienced amongst staff in the high burnout schools.

High work loads were experienced in both high burnout schools and were linked to emotional exhaustion. Many respondents discussed the excessive time demands of the workload and non-teaching duties and that there was always a worry about the work they had or had not done. Green School, while not having a 'hard driving' administration which expected multiple assessments, felt high work pressure due to inefficiency and the pressures that came with the 'open plan' layout. This physical setting provided far more noise, required the teachers to get on well with other team members and was far more emotionally exhausting than single classroom settings. Pink School also experienced high work loads, with the major stress being contributed by the principal's excessive demand for assessment and constant pressure to stay competitive and up to date with the latest curriculum changes. Neither principals used effective work-reducing strategies and both high burnout schools were also expected to cope with large class numbers and extra classes.

The high burnout schools staff experienced differing levels of role ambiguity. Green School, while having reasonably well defined roles, lacked clear work expectations and principal feedback. Green School's principal was also unclear about his own role expectations and this is likely to have contributed to the

school's lack of organisational structure. Pink School, on the other hand had clear role expectations which were extremely high from both the principal and parents.

Support from administrative staff and other teaching colleagues was another important factor that helped to alleviate symptoms of burnout and Green School staff talked about the positive support from parents which was found to be very helpful. Green School staff perceived their principal as supportive, but he did not successfully solve problems by taking action and preferred taking a collaborative approach to problems. Pink School staff, on the other hand, perceived a lack of support from all quarters, the principal, senior staff and parents and many staff included cynical, pessimistic and negativistic comments typical of the burnout syndrome.

In the high burnout schools, the social environment with its internal and external interpersonal relationships included both positive and negative interactions. Green School's coworker cohesion included many negative, defensive and hostile interactions which affected the school's team spirit and had a significant negative effect on some teachers. Despite this, syndicate or 'home groups' teachers were supportive of each other and this provided emotional and practical support for members. Green School's emphasis on collaboration and inclusiveness provided strong support from parents and the community and fostered good relations between these groups. Pink School, on the other hand, had moderate coworker cohesion. Many positive interactions were displayed despite strong dissatisfaction with the principal. Team spirit and support was also evident in syndicate groups. Pink School had a very different relationship with the outside world compared to Green School. The principal and many staff explicitly expressed their distrust and suspicion of parents and community groups. Parents were stated as being "nosy and interfering" and "unsupportive" and having high expectations.

Green School staff perceived there to be low efficiency in the school with time wasted regularly by the process of getting group consensus. Lack of clarity was also raised, with the example given of vague rules and regulations and unclear guidelines. Staff perceived that they had high autonomy and that they could be creative, and by the nature of the job, would regularly use their initiative. Pink School staff, on the other hand, perceived the school and staff to be highly efficient and that high efficiency and performance was expected of them. This 'hard driving' attitude mentioned previously, coupled with the high work load exacerbated stress and contributed to symptoms of burnout. Very little autonomy was evident in the decision making process. The principal kept things tightly under control, which limited freedom of expression and

contributed to tension and underlying conflict. Despite this, teachers did have moderate autonomy in their classroom teaching, but this was still controlled by syndicate decisions and ministry of education requirements.

Both Pink and Green School had similar physical environments and similarly high decile ratings. Both schools were in quiet streets of good suburbs and had pleasant grounds and good amenities. The open plan layout of both Pink and Green classrooms was seen as a negative in regard to them being more noisy and more visible to onlookers which caused teachers to feel more emotionally exhausted. However the open plan classrooms were also seen as a positive feature of both schools emphasising collaboration, sharing and team work. Both Pink and Green Schools had a more modern appearance and Tables 6.6 and 6.7 showed similar findings in relation to lighting, termperature and amenities. Despite the different physical environments of Green and Pink School the surroundings in each school were never highlighted as causing major levels of stress. While some features of the environment were annoying (for example both schools staff mentioned lack of work space), most staff were not too concerned about the physical aspects of the school. Apart from the open plan setting discussed above, staff did not regard their physical environment as being a stressful feature of teaching life.

Low Burnout Schools

In the Low Burnout Schools (Red and Blue), the leadership style and the way in which decisions were made strongly contrasted to the high burnout schools. In both low burnout schools the administrative environment included leadership styles that were less extreme but which incorporated a combination of strong leadership, where certain decisions were made by the principal and others by collaborative means. Red School's principal, for example, used a mixture of autocratic and consultative styles of decision making and was well organised and well respected amongst his staff. Red School principal also used techniques such as humour and highlighting the positive which had a positive, uplifting effect on staff. Blue School on the other hand, had a traditional, conservative principal who also used both autocratic and collaborative means of decision making. The administration tended to be paternalistic but also efficient and generally well accepted.

Many Red School staff discussed how up-to-date and efficient the principal was. He was also described as "trying to scale the corporate ladder", but staff were generally pleased that this brought about opportunities to be sent on courses to upskill. Blue School staff also perceived the principal to be efficient and well organised. The principal also displayed a warm, if somewhat paternal disposition, being friendly and approachable. Both Red and Blue School had high work loads similar to the high burnout schools. However in the case of

Red School, responsibilities were evenly shared and humour was often used to ease pressure. Clear expectations were also given and the principal's efficient use of time and good planning also gave teachers advance warning of upcoming events. Blue School also used helpful strategies to alleviate the work load, such as standardised planning sheets and giving staff some time off when under stress.

Both low burnout schools' staff lacked role ambiguity. Red School's principal was perceived by staff to provide very clear expectations which gave individuals and syndicates well defined roles and clear work expectations. The principal and senior staff also gave regular feedback to staff. Blue School's principal also gave his staff clear expectations of duties and requirements. Both Red and Blue Schools' principals had high expectations but there was administrative support given as needed. Red School parents' expectations of staff were high but considered reasonable. Blue School parents' expectations were reasonable, but some teachers thought parents were critical. Support from administrative staff and other teaching colleagues was another important factor that helped to alleviate symptoms of burnout and both Red and Blue School staff talked about the positive support from their principal, senior staff and syndicates. Red School staff perceived their principal as very supportive, successful at solving problems, and someone who would take action and keep matters confidential. Blue School staff also perceived the principal to be supportive and many staff mentioned the special nature of the DP who was particularly helpful and caring.

In the low burnout schools, the social environment with its internal and external interpersonal relationships, included mostly positive interactions. Both Red and Blue School had high coworker cohesion that included a cohesive supportive atmosphere. Red School had many positive interactions even although there was a particular senior staff member who was generally disliked. Syndicates displayed vision, had shared goals and good administrative support. Overall the social environment appeared happy and contented. Blue School's principal also stated that he tried to foster good relationships and this may have influenced the strong teamwork evident in Blue School's syndicate interactions.

External relationships with parents and the community for both Red and Blue School were perceived positively. Red School staff, although perceiving parents to be critical, welcomed them into the classrooms. Red School principal was available to parents. Red and Blue School perceived the Board of Trustees differently. Red School's principal thought that the BOT was positive, helpful and enriching. Blue School's principal perceived the BOT unfavourably, seeing it as unfair and its dealings negative.

Efficiency was high at both schools especially Red School. In particular, Red School's principal (as stated previously) was extremely well organised and up to date on the latest education developments. This flowed on to his staff and syndicates through useful administrative planning and facilitated staff's work load by making matters clear and well organised. Blue School's principal was also efficient, having a 'good business head', which was helpful, particularly with *Tomorrow's Schools* requirements to have principals who are good business managers. Autonomy at both Red and Blue School was moderate. Red School staff were able to suggest changes and voice concerns but the principal and senior staff generally made the decision on important matters. Teachers had autonomy in their classrooms, but within certain guidelines placed by the ministry and syndicate decisions. Blue School staff were also able to make suggestions but, as stated by one staff member, "everything has to be checked" and all decisions made had to be run by the principal first. Collaborative autonomy was observed in syndicates and, as in Red School, major decisions were mainly carried out by the principal and senior staff. Conflict was very low at both Red and Blue School. At Red School, the principal was often observed using humour which often deflected conflict and created a cohesive atmosphere. At Blue School, little conflict was observed, even though dissenting arguments were often voiced.

Both Red and Blue Schools had similar physical environments and similarly high decile ratings. Blue schools was located in two quiet streets in a good suburb, had pleasant grounds and good amenities. Red School was located in a less desirable area, in the corner of a crossroad with heavy traffic with difficult access for cars. Both Blue and Red School had traditional classrooms (not open plan) and Red School was older, in places dreary and less attractive, with a mixture of old and new features. Tables 6.8 and 6.9 showed similar findings for Red and Blue School although Red School's lighting and ventilation were not as good as Blue School's. Despite different physical environments the surroundings were never mentioned in either school as causing major levels of stress. While some features of the environment were annoying and staff would have liked certain features changed or amended, most staff were not too concerned about their classrooms or other physical aspects of the school.

Having summarised the features of the four schools, the next chapter presents a discussion and reflective analysis of the research.

CHAPTER SEVEN

7. 0 Introduction

Chapters four to six have each presented a detailed analysis of results for the three phases of the study and have discussed the specific findings. This chapter provides an integration and interpretation of the overall findings. It examines how the major research perspectives outlined in chapter three contributed to the research and the extent to which the thesis was successful in achieving its aims and realising the research objectives. It also discusses the adequacy of the research methods and limitations of the study. Interventions and specific strategies to reduce job stress and burnout are recommended for teaching institutions and, finally, implications for future research are considered.

7. 1 Integration and Reflection on the Findings

Phase One revealed that levels of stress in primary school teachers were high. There is cause for concern about these reported levels, as many teachers reported negative effects such as lack of energy and confidence, increased anxiety, physical and mental problems, worry about the future and feelings of being unable to cope. Teachers who had taught more than 10 years and those aged in the 40-60+ age group reported the highest stress levels. Principals also reported higher levels of stress than other groups, which they attributed to increased work load and changing roles resulting from the recent administrative changes in New Zealand. The main sources of stress, as mentioned in Phase One, were staff relationship problems; exams, report writing and deadlines; difficult children; workload; and, administration/ paperwork. This phase also highlighted the contribution of changing roles and subsequent higher workloads to raised stress levels resulting from the structural changes and new policy developments of 1989. Following similar trends, Australian education has, in recent years, also had to deal with the pivotal issues of raising student achievements and elevating school effectiveness that have led to new responsibilities and workload for teachers and administrators (Wilson and Otto, 1998).

While the findings from this first phase cannot be attributed to administrative reforms in education alone, many teachers noted that increasing workloads and the demand for 'hard' measurable school outputs were having an adverse effect on their well-being. These outputs included a greater number of meetings (often out of school hours), special in-service sessions, increased amounts of paperwork, evaluation reports and additional professional reading;

all of which made excessive demands on teachers' time and provided more pressure. The stress caused by 'difficult children' is perhaps a feature of teaching which is inherent in the teaching profession. However the economic climate, with its reduced financial resources and staffing and closure of schools, may be putting extra pressure onto teachers by ensuring high teacher-pupil ratios in many schools. Problems with differing needs and the requirements of having to consider not only the intellectual development of the student but also the student's social/emotional problems, were also powerful sources of work stress for teachers and can also be seen as family difficulties bound within community and society.

This phase suggests that there may be links between the teachers' estimated level of perceived stress and the reported frequency of physical and psychological symptoms. Many teachers reported ill health and psychological problems and stated that the stress of their job was causing these problems and that they were unable to control the situation or were trying to leave the job in order to save their physical and mental well-being. This finding verifies the warning of Mitchell, McGee, Moltzen and Oliver (1993) concerning staff overload as a result of educational reforms. The findings from this initial phase, while exploratory, emphasise the urgent need to develop beneficial organisational strategies to reduce stress levels among staff, before teachers reach the more severe, protracted form of work stress and burnout. Shinn, Rosario, Morch and Chesnut (1984), whose research covered job stress and burnout in the human services, similarly state that little is gained by exhorting individuals to change their ways, as individual coping may have little impact on job strain, but that agencies should take action to reduce stress and improve supervision of its members.

Phase Two's results confirmed the construct validity of the Maslach Burnout Inventory and showed that New Zealand primary school teachers reported significantly higher scores on the MBI emotional exhaustion (EE) subscale than their United States counterparts. It needs to be recognised however that the US normative data were collected in the 1980's and hence differences between New Zealand and the United States teachers may reflect the different times at which these two sets of data were gathered. In order to verify these differences, it would be necessary to carry out another between country comparison using a more contemporary US sample that has equivalent characteristics to the New Zealand sample.

Teachers with few years teaching experience, staff in the 30-49 age group, and year 4-6 teachers recorded the highest emotional exhaustion scores. Staff who reported the presence of 'many' support networks reported lower EE scores than their colleagues reporting 'few' support networks. Several reasons may be proposed for the high levels of emotional exhaustion reported. Firstly, the recent educational reforms (mentioned above) which included the fast tracking of subject area reforms created a very stressful process that required teachers to work overtime in order to keep up with assessment and documentation demands. Secondly, New Zealand primary schools can be seen to include excessive curriculum demands on teachers, as they are generally required to teach many specialist subjects such as music, Maori language, sport/fitness and art, in addition to the core learning areas. They are also required to take on extracurricular activities, such as weekend sports, choir and drama events, and provide a supportive, pastoral role to their students. Most New Zealand schools do not have counsellors in the school and thus the teacher's role also extends to include psychological helper and provider of specialised programmes for children with special needs. This dual role of teacher and support person may contribute to teachers' feelings of emotional exhaustion and alienation or distancing from their students. In New Zealand, strong emphasis is placed on social responsibility and obligations of schools to the community. The notion of 'in loco parentis' is readily catered for in primary schools and teachers are expected to take on many different roles as educator, counsellor, pastor and even parent. This may stand in contrast to the situation overseas where the role of the teacher is viewed more as an 'occupation', with fewer obligations and limited support requirements outside of the customary academic role. New Zealand's social and bicultural values may to some extent have influenced the low depersonalisation scores, whereby teachers have it ingrained in their own expectations to possess caring, human attitudes to their students, regardless of workload.

These findings from Phase Two clearly reiterate the need for stressor-reduction strategies at the organisational level. Clear identification of aspects of the school environment that may lead to lowered burnout levels is recommended.

The qualitative data presented in Phase Three illustrated that the lower burnout schools had more favourable administrative environments in some areas, particularly leadership, workload, role expectations and role ambiguity. Table 6.4 and the triangulation checkpoints also confirm these differences between the high and low burnout schools.

Leadership

The four schools showed different styles of leadership. However, the two low burnout schools showed stronger and more democratic styles of leadership and collaborative methods of decision making. The qualitative data showed that the autocratic, 'hard driving' style of leadership with the lack of collaboration and confidentiality, as shown in Pink School (high burnout), led to many teachers feeling pressured and overburdened. Green School's (high burnout) style, being extremely collaborative and lacking in strong leadership, was, on the other hand, time consuming and frustrating. While one may not state a direct causal relationship from these findings, they are consistent with findings by Chapman (1983) and Cook (1983) that the principal's leadership style is related to teacher burnout.

The characteristics of role expectations and role ambiguity, with their emphasis on clarity and staff knowing what is expected of them in their work and having clear administration policies and procedures, have an important effect on staff functioning within the school organisation and these features were found more prominently in the lower burnout schools. While all four schools had similarly high expectations from their principal and parents, the presence of clear administrative guidelines, policies and procedures enabled the lower burnout school staff members to more comfortably deal when dealing with parents and understand their own expectations in their role as a teacher.

Workload

Work overload and high pressure in terms of being able to keep up were also found in the qualitative study to be a primary predictor of emotional exhaustion. This is also consistent with the research findings of Weekes (1982) and Morracco (1981), who determined that workload was the most important stressor in teacher burnout. All four schools had high workloads, but within the low burnout schools staff were more able to manage their workloads and complete the requirements placed on them. This was due to a number of features which became apparent from conversations with Red and Blue school participants. Firstly, administration incorporated effective strategies to ease the work load, administrative support was stronger and the amount of paper work was not excessive and kept to reasonable limits. Humour, highlighting the positive and having shared goals were also important. In Red School, for example, the high workload was shared evenly among staff and the efficiency and clear expectations of senior management also helped to reduce the

workload. In the high burnout schools, participants revealed that high workloads caused enormous pressure and emotional exhaustion. Pink School, with its excessive levels of assessment and paper work, constant pressure to keep up, numerous meetings and non-teaching duties and little 'time out', appeared to have contributed to feelings of powerlessness to cope and increasing feelings of alienation, helplessness, discontent and depression.

While there were no clear differences in efficiency between the high and low burnout schools, the qualitative data showed that efficiency was still an important feature of the administrative environment. Two examples highlight this. Green School's inefficiency was attributed by teachers to be due to both the style of leadership and the lack of clear policies, procedures and administrative guidelines. This caused frustration, anger and lack of respect for leadership and increased the workload of staff. On the other hand, in Pink School, the extreme efficiency of the principal and her expectation of high performance also caused teachers to feel overburdened and unable to keep up with the expected workload and high efficiency that was expected of them. While efficiency is to be commended, this phase of the research revealed that efficiency must be supported with clear, supportive policies and procedures that are reasonable and manageable.

Social and Interpersonal Relationships

Phase Three's qualitative data indicated that the lower burnout schools had more favourable social environments in some areas, particularly co-worker cohesion, support and conflict. Table 6.5 and the triangulation checkpoints also confirmed this difference between the high and low burnout schools.

The characteristic of co-worker cohesion, with its emphasis on team spirit and how staff employees were friendly and supportive of each other, had an important effect on individual staff members, often lessening their levels of stress. The lower burnout schools exhibited higher levels of co-worker cohesion and team spirit, and had more supportive and loyal syndicate relationships. This appeared to contribute to teachers' satisfaction and feelings of content and contributed to higher morale and a generally positive, cohesive atmosphere. Conversely, both high burnout schools had lower levels of co-worker cohesion, with Green School displaying many negative, aggressive interpersonal difficulties. Pink School's social environment displayed higher levels of tension and dissatisfaction and mistrust were often expressed. These findings are consistent with a study by Brown and Ralph (1992) who also found

that relationships with colleagues, including lack of community spirit, little or no social interaction between staff groupings, poor systems of communication, personality differences and uneven distribution of work loads, were all causes of stress that led to poor school morale.

Support was an extremely important feature in both low and high burnout schools. High burnout school staff mentioned lack of support frequently and from all areas, principal, senior staff and parents. Conversely, low burnout schools perceived that they had high levels of support. This finding contributes to the numerous reports in the literature that support is an important predictor of low burnout. The qualitative data clearly highlighted these differences. For example, Red School made support and guidance a key feature of the school, with the principal being a good listener who was helpful at sorting out problems. Blue School was also described as providing high levels of support from the principal and senior staff who used helpful strategies to assist staff. Conversely, in the high burnout schools there was a perceived lack of support from the principal and senior staff in one school, and a supportive principal in the other but one who did not tackle the problems or help staff actively solve them.

The qualitative data clearly distinguished between the type of support that was important to staff. Principal and senior management support were perceived as more important in their teaching than support from parents, community, friends and family, although these were seen as helpful. Similar findings on the importance of support were also found by Hendrickson (1979), Loviglio (1979), Berg (1980), and Blase (1985). The latter concluded that lack of support was a major cause of teacher burnout.

The qualitative data showed clear differences in levels of conflict between the high and low burnout schools. The low burnout schools had a more favourable environment in terms of visible tension and conflict. Although disagreements were observed in all schools, in the high burnout schools it was more noticeable. Red School's principal's use of humour, as well as decreasing stress levels, also deflected conflict and eased tense situations. Blue School's deputy principal, whose helpful, supportive and caring nature fostered a feeling of good will, defused many tense situations and contributed to the low level of conflict. While conflict levels were higher among Green and Pink School, in both situations it appeared from observations and teachers' perceptions that the problems were due to the principal's leadership style.

The qualitative data demonstrated that the high and low burnout schools had similar physical environments, suggesting that the physical environment did not have a direct impact on teachers' stress levels. In all of the schools there were physical features that were perceived as favourable and unfavourable and overall the schools were not vastly different. The open plan setting in both high burnout schools was, however, often mentioned as causing stress. This was due to a number of factors: (1) more noise created by having more children in the adjoining rooms; (2) being more visible to outsiders; and (3) the pressures of co-teaching, in having another teacher in the room. The layout of this setting also relates to a different style of teaching and it would be valuable to consider the impact of the open plan classroom setting versus the single cell classroom in subsequent research.

Despite the fact that the physical work environment was not a major cause of stress or burnout, it may have aggravated particular stress symptoms such as headaches and irritability. In particular, the qualitative data suggest that apart from the needs of adequate lighting, temperature control, decorations and staffroom requirements, there was a definite need for personal work space and storage areas. This finding is consistent with Ross and Altmaier (1994) who also state that attention be paid to the improvement of the physical environment to alleviate burnout.

One important study of teacher burnout which highlights a number of organisational characteristics mentioned above was carried out by Ianni and Reuss-Ianni (1978). They found that certain organisational characteristics were important determinants of reduced apprehension and stress among teachers. As with the present research, the importance of the principal's style of leadership and their initiation of a structure of order seemed to be a critical factor that differentiated 'safe' schools from those that had trouble. Strong leadership was described by teachers as meaning a commitment to educational (professional) leadership, as well as control over the school. The principal's ability to initiate a structure of order in the school was particularly important. Teachers explained they felt safer, more secure, could 'work better' and felt 'more freedom to teach' in a well-ordered school. The researchers also concluded that if a school is large and impersonal, with lax and inconsistent discipline, the rules ambiguous and arbitrary or unfairly enforced, the courses irrelevant and the reward system unfair, then the school would lack a rational structure of order and the basic elements necessary to maintain social bonds

(Ianni and Reuss-Ianni, 1978). The study also found that self esteem and job satisfaction, commonly cited mediators of burnout, were important in mediating stress. Cohesiveness and a feeling of community among teachers and a strong sense of identification with the school's mission were also frequently mentioned.

7. 2 Meeting the Aims of the Research

The present research was designed with the aims of identifying levels of stress, the situations causing stress and the coping strategies of New Zealand school teachers. It also sought to analyse the level of burnout among New Zealand primary school teachers using the Maslach Burnout Inventory. Lastly the research sought to identify aspects of school work environments that contribute to both high and low levels of burnout amongst staff. This thesis has accomplished these aims and has contributed to knowledge about teacher burnout specific to New Zealand school teachers. It advances the view that education reforms and work overload contributed highly to stress levels, and that, subject to the limitations mentioned, New Zealand teachers showed significantly higher levels of emotional exhaustion than their US counterparts. While this is discussed in chapter five, it suggests that further investigation into New Zealand's curriculum and extracurricular demands with regard to policies world-wide is warranted. The third phase of this research found that aspects of the school environment that contributed to lowered levels of burnout were mostly administrative and social. The fact that most principals and senior management staff in early childhood teaching have had little training in management skills (Rodd, 1994) suggests that strategies are needed for New Zealand management staff to provide more equilibrium in administrative and interpersonal areas. These strategies should also be effective for non-management staff and foster improved staff performance and lowered burnout levels. Suggested strategies are given below in 7.4.

While it was considered necessary in Phases One and Two to use quantitative methods to establish the levels of stress and burnout in the New Zealand schools, it was decided that for Phase Three, a narrative, qualitative approach was a stronger, more in-depth method of acquiring information and documentation of participants' stories. It enabled the researcher to share the experiences of the participants and understand why they acted and felt the way they did. While this method was more time consuming, it was considered to be sensitive and provided a greater scope of information than using a questionnaire or survey type instrument. It allowed the researcher to check with interviewees

that the words they spoke were accurately recorded. Data could also be triangulated through analysing the information derived from interviews, observations and conversations. Specific objectives of this third phase were to find aspects of school environments that contributed to both high and low levels of burnout and it was hoped that the research would identify strategies that would contribute to lowered levels of stress among staff.

Trustworthiness of the Findings

A feature of the research was the willingness of the staff in all phases of the research to participate in the study. This willingness contributed to a good response rate during the data collection process and the detail in the responses given in both surveys and interviews. This indicates that the study was successful in documenting the views of the participants, especially as multiple methods of data collection were used. The multidimensional nature of the research made it possible to 'triangulate' the data, which further added to the reliability of the findings. As well as helping to meet the aims of the research, the issue of trustworthiness (discussed in detail in chapter six, 6.1.3) strengthened the use of qualitative research in phase three, enhanced the overall precision and accuracy of the research process and demonstrated the usefulness of the qualitative approach.

The criterion of trustworthiness or objectivity (Lincoln and Guba, 1985), was met due to the researcher's awareness of her views on burnout and her need to be objective when collecting data. For example the researcher was careful about the way interview questions were read out loud. This included tone of voice, manner, gestures and being aware not to 'lead' questions. In answering the issue of credibility or internal validity, which asks if the findings are congruent with reality and if the findings captured what was truly there, the researcher attempted to meet these criteria by using a number of strategies. These included long term observations, member checks (interviewees were offered their completed interview transcripts for verification), triangulation checkpoints and peer examination. Disciplined subjectivity, which involved reflection, introspection and self-monitoring, was also used and exposed the data to continual questioning and re-evaluation.

The criterion of dependability or reliability refers to the consistency of the research findings. In other words, if the study is repeated will it yield the same results? As human behaviour is never static, and the replication of the phase three study will never yield the same results if repeated, Lincoln and Guba

(1985) suggest that rather than demanding others get the same results, the results make sense and are consistent. The qualitative research used two techniques, triangulation and an audit trail to ensure that the results were dependable.

The criterion of transferability or external validity refers to the researcher giving sufficient descriptive information for someone else to transfer the research design to a similar site. In other words, are the results of the study able to be generalised? While this criterion has plagued qualitative researchers in general, it has been suggested that using rich, thick description can help so that readers can determine how closely their situations match the research situation and hence whether their findings can be transferred. Phase Three provided detailed description of the school context to enable readers to compare the 'fit' with other school situations. The use of four schools also helped to maximise the diversity between the high and low burnout school environments.

Inclusive Research Perspective

Adoption of an inclusive research perspective provided a framework in which it was possible to consider the results from several different positions. Each of the major research perspectives, including positivism, interpretivism, critical theory and postmodernism, informed the research process and influenced the way the research was conducted (see table 3.1). The research perspectives, as well as contributing to the mindset of the researcher, provided a multi-dimensional approach to the study of teacher burnout which included the use of different data gathering methods.

Specifically, influence of the empirical framework was evident with the use of quantitative, objective data gathering in phases One and Two. This perspective provided a framework for answers to the questions: "What are the levels of stress in New Zealand teachers since the education changes?", and "How do the levels of burnout (using the MBI) compare with those of teachers in the United States?".

The interpretivist perspective, with its emphasis on understanding diversity and valuing of solidarity and pluralism, contributed to finding answers to the question "How do teachers see and understand stress?". These questions were answered using ethnographic techniques such as observations, interviews and document reviews.

The critical theory perspective, which emphasises emancipation, empowerment and social change, highlighted the importance of understanding how society affects certain groups, particularly within primary schools. The use of both qualitative and quantitative research methods enabled the researcher to find out how the New Zealand education reforms impacted on teachers and principals, and how they impacted on their workloads and levels of stress.

Lastly, the post modernist perspective, with its emphasis on being critical of process, highlighted the importance of devising methods to find out how teachers viewed themselves in the stress process and to reflect on how their lives were affected by their school and the work that it entailed. This perspective also led the researcher to adopt methods of self reflection, thick description and the use of diaries, which contributed to the qualitative data collection.

COR Theory of Burnout

This research also set out to apply the Conservation of Resources theory (Hobfoll and Shirom, 1993) concept of burnout (the process of wearing out and wearing down of a person's energy, or the combination of physical fatigue, emotional exhaustion and cognitive wear-out that develops gradually over time) to the work setting. Rather than providing a specific model of burnout itself, this theory focuses on the general work conditions or environment under which job-related strain and burnout arise. It is clear that many school environments provide the setting for a spiral of resource loss (for example role ambiguity, interpersonal conflict and unsatisfactory leadership). Many teachers from the Phase One research discussed their perceptions of resource loss. Those frequently mentioned included: lack of staff appreciation, lack of support from management, parental expectations, marking deadlines, too many teaching roles time pressures/work overload, difficult children/special needs, extracurricular activities, high class sizes; and, administrative changes. These examples of resource loss required teachers to find additional personal resources (e.g. stamina and social skills) in order to cope successfully with the resulting stress. Many teachers discussed ways of dealing with their stress. Typical coping strategies included talking with friends and family, watching television, eating (more or less), doing exercise, taking vitamins or medication and working late, amongst others. For some teachers, these coping strategies were not effective and their personal resources such as physical vigour, emotional robustness and cognitive agility were not able to be replenished. Phase Two results, particularly, showed high levels of emotional exhaustion, which is a common reaction to increased pressure in the workplace. Maintaining discipline and providing high

levels of student achievement often place unrealistic expectations on teachers and contribute to feelings of frustration, guilt and a sense of failure. This resource loss for some teachers in the study was experienced as burnout. Specific teachers who discussed their feelings and perception of the stages of burnout felt helpless, hopeless and exhibited negativity and depression.

Overall, the aims of the research were met. The levels of stress, situations causing stress and the coping strategies used in New Zealand schools were identified. The construct validity of the *Maslach Burnout Inventory* was confirmed and levels of burnout among New Zealand primary school teachers compared with United States counterparts. Finally the research successfully documented the experiences, values and beliefs about burnout in primary school environments.

7. 3 Limitations of the Study

While the present study was extensive in the range of data collected and analyses undertaken, it is important to acknowledge a number of methodological limitations.

1. The ethnographic method used in Phase Three is subject to observer bias during data collection and analysis.

While it is difficult to see how bias can be avoided completely, the researcher was aware of her views on the burnout and was careful about the way in which the data was collected. The researcher was also aware of seeking out answers that would support preconceived notions and attempted, as Gavron (1966) stated, to "be aware of the bias problem" and that "constant self-control can help" (p. 159). Another example includes observations. The researcher, engaging in reflective professional practice was able to self reflect and to be critical of her observation and mental thought processes, with the aim of being as objective as possible. Methods of triangulation also aided clarification and helped to keep bias in check and establish reliability.

2. Selection and number of schools used in Phase Three was subject to permission and administrative selection rather than random sampling.

Although bias was possible with the purposive sampling of the four schools, certain criteria were used to select the four schools (see 6.1.4) and permission from all schools was an essential ethical requirement. It is also likely that the Phase Three

sample was limited due to its location being in Auckland and, as such, may not have been representative of teachers in other places of New Zealand. Bell (1999) states, "it will probably be difficult for an individual researcher to achieve a true random sample" (p. 126). Using four schools for the ethnographic component of the research ensured manageability. Although the small sample limited the ability to generalise of the findings, this enabled useful comparisons to be made.

3. Selection of interview participants in Phase Three was subject to permission and administrative selection. This may not have resulted in an sample that was truly representative of the views of staff in the four schools.

Interviews are always dependent on the availability and good will of the participants. While every attempt was made to establish a representative sample of participants from each school, excessive work demands and time constraints resulted in a reduced number of teachers agreeing to participate.

4. Measurement Limitations. The questionaires used to gather data in each phase may not have been effective in eliciting a true measure of burnout.

Both Phase One and Phase Three used piloting procedures and both questionnaires were generally effective in gathering data on participants backgrounds characteristics and experiences of stress and burnout in the work environment. Phase One gathered useful preliminary information on teachers' perceptions of stress, and the interviews in Phase Three provided contextual data on the three main areas of their school environment. While it is not possible to claim with confidence that the study was effective in eliciting the deeply rooted beliefs of the participants, it did, however, gather numerous perceptions on those factors that contributed and inhibited burnout in the workplace. Stress and burnout are global constructs, and as such, any measurement may be insensitive. The Maslach Burnout Inventory used in Phase Two, while widely accepted and used overseas, has not been widely used in New Zealand. This study was, however, able to confirm the factor structure of the MBI.

With these limitations in mind, the research was moderately successful in achieving its initial objectives. Based on the findings of the study and other research and practical experience, the following section provides a discussion of interventions, with specific strategies for school organisations and those in the practice of teaching.

7. 4 Interventions: Strategies for Teaching Organisations

Various burnout interventions have been recommended in the past decades and interventions to reduce job stress or burnout have generally been directed at three levels: (1) the individual; (2) the individual/organisation interface; and (3) the organisation (De Frank & Cooper, 1987). While this literature has provided approaches that have been geared towards the individual, most were rather general and not specifically tailored to reduce burnout (Schaufelli & Enzmann, 1998). Therefore the following interventions or strategies, based on the present study's findings, focus on the three areas of the school environment: administrative, social and physical.

Administrative Environment Strategies

1. Establishment of a positive climate and overall atmosphere in the school. School leaders particularly need to use their personality and leadership skills to establish a positive atmosphere and should demonstrate to their staff a balanced perspective, honesty, humour, valuing the opinions of teachers, clear work expectations and reasonable assignment of duties. Other useful strategies could include team building sessions (once a month), using humour in newsletters or in other appropriate information and rewarding positive behaviour of staff.

2. Role clarification: provide clear administrative policies and procedures that are attainable and relevant objectives so that staff know what is expected of them. This information should be accessible to all staff including teacher aides. Regular performance feedback and performance evaluation should also be provided. A review of school systems that stem from the chalk face should be discussed at school meetings.

3. Communication: communicate realistic and reasonable expectations to staff. Set up systems that encourage open and clear communication at all levels and back to the key management team. Provide clear expectations for all staff so they can fulfil their specific responsibilities and reinforce their working as a team. Keep work overload and paper work to manageable limits by giving clear instructions and due warning of upcoming requirements and share workloads equitably.

4. Provide training for senior management staff in areas of leadership, planning, supervision, interpersonal communication and financial management.

This will help senior staff to expand their knowledge and develop professionalism.

5. Provide programmes of induction for staff internally promoted or 'moved' sideways to take on new roles, as for example, when promoted to middle management positions. Set in place mentoring processes.

6. Provide training and staff development so that staff can successfully implement planned changes (e.g. curriculum and assessment changes).

7. Provide information on career management, for example, recruitment or promotion. A professional supervision network could be set up in the school to achieve this.

Social Environment Strategies

1. Promote a culture of 'collegiality' in which the relationships between staff are mutually supportive and which extend beyond matters of effective task performance towards an awareness of others' personal needs. Management particularly needs to promote positive, supportive relationships and provide positive feedback and guidance whenever possible. Management needs to act with integrity, on personal as well as professional levels in order to build trust with colleagues.

2. Promote the sharing of values and goals by all members of staff. This could be achieved by setting aside time in a staff meeting once a month to explore, in groups, goals and values essential to the school. It would also provide the opportunity for staff to express themselves and influence school policy.

3. Use staff development days or other opportunities to explore the 'nature of roles' and problems of role conflict, ambiguity and so on. Role playing, group sharing and team building exercises could be used to work in this area. Motivational speakers, if available, could be utilised on occasion.

4. Promote awareness of teachers' holistic health, and competing demands from other areas, i.e. personal and home life. This could be actively promoted in professional development workshops, in staff newsletters and in the Education Gazette or other publications.

5. Carry out stress audits to elicit staff reactions and preferences in order to assist management in developing action strategies that help improve organisational effectiveness and staff well being.

6. Set up a mentor system to support all staff (not only newcomers) by more experienced colleagues, or alternatively, provide teacher support teams. This could be developed as part of an overall peer supervision system,

Physical Environment Strategies

1. Aim to improve the physical environment for staff, for example, by keeping student/teacher ratios to the lowest possible level. This could involve the use of various grants (e.g. SEG, E.S.O.L) but should be based on school data and staff consensus. Provision of good lighting, ventilation and noise insulation is very important and involves the monitoring of health and safety issues. For example the provision of step ladders to display students work rather than chairs, while often overlooked, is part of an awareness of safety issues.

2. Include provisions for informal fitness and wellness programmes. These could include mental as well as physical provisions. For example, links with other schools for social games of netball, soccer or other exercise would increase supportive social networks. Meditation, yoga, guided imagery or other stress reduction techniques could also be provided. Teachers also need to be informed about the nature of stress, for example, that it is unavoidable but that a certain amount is stimulating and how to keep stress levels to a minimum. These provisions may reduce levels of burnout in the school because of improved physical and mental fitness and decreased vulnerability to job stress.

3. Professional development aimed at improving levels of professionalism should be a priority. For example, time management, goal setting and information technology are some areas that would improve teachers' personal and professional well-being.

7. 5 Concluding Remarks: Implications for Future Research

There can be few doubts about the significance of burnout in school organisations and in the life of teachers who work in this helping profession. Further research in the area of teacher burnout in New Zealand is necessary, not only at the primary school level but all levels. It is likely that intermediate, secondary and tertiary teachers will have different kinds of stresses from primary school teachers because of their different school organisations.

Assessing teachers in small towns and rural areas would also contribute to the understanding of burnout and give further insight into its complexity. Indications from research have shown that individual variables, for example, personality type or self-esteem, as well as organisational variables, can make a difference to burnout levels experienced by individuals and would be worthy of future research.

The issue of 'change' will be a continuing fact of life for teachers in New Zealand. Teachers will have to adapt to new curriculum changes and policy changes as well as changes in organisational structure. Indeed, all individuals will have to adapt to change. As change brings new and often stressful adaptation requirements, it would be of benefit to carry out research on successful methods for coping with change. Home or personal life stress is another area that is likely to have an impact on teachers' stress levels, and assessment of these variables in future research would also be of benefit in assessing whether they contribute to or mediate the effects of teacher burnout.

Despite the complexity of burnout, this study would emphasise the point that teacher burnout must be seen not as an individual problem, but as a situational/occupational problem for which the organisation is primarily responsible. While there is much media publicity concerning stress, Maslach and Leiter (1997, p.34) strongly warn against the tendency to blame the victim:

> Burnout does not result from a genetic predisposition to grumpiness, a depressive personality, or a general weakness. It is not caused by failure of character or a lack of ambition. It is not a personality defect or a clinical syndrome. It is an occupational problem.

This research has identified some of the key contributors to teacher burnout by showing differences in two high and two low burnout work environments. It has provided some useful strategies that could go some way to reducing burnout, and it indicates that it is time for school organisations to realise that burnout must be tackled by organisation-based preventative strategies accompanied by individual based treatment. Providing these strategies will not only reduce major expenses in terms of absenteeism, reduced quality of service and poor performance but will also prevent legal action that is beginning to occur due to staff neglect. Indeed, as well as outlining cost effective measures, the main benefit of these strategies will be in the attainment of healthy school

environments and in demonstrating that the responsibility for helping to protect teachers from burnout is jointly that of management and fellow teachers.

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Appendices

1. Definition of Terms.
2. Phase One : Survey of Teacher Stress and Information Sheet.
3 Phase Two: Survey of Teachers Experiences and Work Conditions and Information Sheet for Teachers.
4. Phase Three: Interview Schedule: Teachers Perceptions of their Working Environment.
5. Administrative and Social Environment Triangulation Checkpoints
6. Audit Trial: Qualitative audit by Cathy Collinson PhD.

Appendix 1

Definition of Terms

To clarity the confusion between the terms 'stress' and 'burnout', the following definitions have been given below, as a clear separation of the variables related to stress and burnout is needed. Chapter two gives further indepth definitions of these terms.

Burnout - Is a syndrome which emanate from an individual's perceptions of unmet needs and unfulfilled expectations. It is characterised by progressive disillusionment, with related psychological and physical symptoms which diminish one's self esteem. It develops gradually over a period of time (Gold & Roth, 1993).

Strain - is a consequence of perceived stress. Subsequent unsuccessful coping responses which are unable to reduce the level of psychological or physiological activity produce 'strain'.

Stress - is a condition of disequilibrium within the intellectual, emotional and physical state of the individual; it is generated by one's perceptions of a situation, which result in physical and emotional reactions. It can be either positive or negative, depending on one's interpretations (Gold & Roth, 1993).

Stressors - are stimuli which are received and appraised by the individual. If the threat perceived is a result of cognitive processes, physiological reaction occurs.

MBI - Maslach Burnout Inventory - this instrument uses the terms emotional exhaustion, depersonalisation and personal accomplishment to assess burnout, and also uses 'school organisation' as the means to describe the school setting.

Appendix 2

PHASE ONE : SURVEY OF TEACHER STRESS

Name
Institution
Address
Location

Information Sheet for Teachers

Purpose

The purpose of this survey is to obtain information on teacher stress and coping strategies. Given the changes that have occurred in New Zealand education over the last few years, it is important to know how much stress teachers feel they are under, and the methods they use to alleviate this.

This survey can be completed anonymously or you can give your name if you are willing to participate in a follow-up interview.

I understand that this is a busy time of the year for you. I would be grateful, however, if you can find time to complete and return the survey within two weeks of receipt. Please leave the completed questionnaire in your school office.

A report on the study will be prepared so please feel free to contact me if you would like some information on the results.

Thank you for your assistance.

Anna Whitehead
Department of Education Studies
University of Waikato

SURVEY OF TEACHER STRESS

SECTION ONE: **Background Information**

SEX: Male [ ] Female [ ] **tick one**

ETHNICITY: European [ ] Maori [ ] Polynesian [ ] Other _____
tick one

AGE: 20-29 years [ ] 30-39 years [ ] 40-49 years [ ]
50-59 years [ ] 60+ years [ ] **tick one**

NAME OF SCHOOL: _____

POSITION IN SCHOOL: _____

NUMBER OF YEARS TEACHING: 1st year [ ] 2-4 years [ ] 5-10 years [ ]
10 or more years [ ] 1015Years [:] 1620years [ ]20+ [ ]
tick one

SECTION TWO: **Questionnaire**

1. (Since the changes of education administration in October 1989), how would you rate the current stress in your job? **Please circle the appropriate number**

Very Low Stress				Medium Stress				Very High Stress	
1	2	3	4	5	6	7	8	9	10

2. Rate the level of stress that you feel you are under in your personal life apart from work.

Very Low Stress				Medium Stress				Very High Stress	
1	2	3	4	5	6	7	8	9	10

3. What effect has job-related stress had on your well-being.

Very little Effect				Medium Effect				Large Effect	
1	2	3	4	5	6	7	8	9	10

4. Please list the situations in your job that make you feel under stress **(full sentences not required)** (e.g. marking work, large classes, meeting with parents, extra curricular duties).

5. From the list in 4. above, which three are the most stressful of all? (in order).

1)

2)

3)

6. What strategies do you use to combat or cope with stress associated with your teaching position? (e.g. sports, meditation, counselling, talking with friends, drinking, watching TV, reading, gym, doing nothing, prioritising, etc.)

1)

2)

3)

7. Do you have any other comments regarding stress and how it affects your well being?

Thank you for participating in this survey. It is greatly appreciated.

If you feel that this is an area of importance and would be prepared to be interviewed, please write your name below.

Appendix 3

PHASE TWO: INFORMATION SHEET FOR TEACHERS AND MASLACH BURNOUT INVENTORY (MBI not included)

Survey of Teachers Experiences and Work Conditions
Information Sheet for Teachers

This questionnaire is part of a survey authorised by the Department of Educational Psychology at Massey University. This survey is designed to gather information about teachers perceptions of working conditions and personal adjustment. As a researcher, I am particularly interested in your views on current working conditions in the education environment and perceptions of your satisfaction with teaching. It is also of importance to establish a national picture of the situation in 1995, which will provide a baseline for further monitoring.

I understand this is a busy time for you. I would be most grateful if you could find time to complete the survey by June 1995. The questionnaire should take about 10 minutes to complete. Please leave the completed questionnaire in the envelope provided and place in your school office. Please do not indicate your name. You are assured of the strictest confidence in any information given.

A report of the findings from this study will be prepared and made available on request later on in the year. I will also be providing a stress management workshop for participants which will provide feedback on the research findings and will discuss empowerment techniques (details of this will be given to your principal).

The survey contains two sections. Please complete both sections starting with Section One on the back of this page. It would be appreciated if you could provide your own views without consulting others. By completing the survey, it is assumed that you give consent to participate in this project. If you have any questions regarding this survey please contact me on (09) 4430709.

Thank you for your cooperation.

Anna Whitehead

Section One: Background Information Please complete all questions

1. Name of School _____

2. Teaching Position _____

3. Teaching Level (e.g. new entrants, year 3 _____

4. Are you full time, part time or relieving? _____

5. Number of years teaching at present school? _____

6. Number of years teaching in all schools? _____

7. Gender (male/female) _____

8. Qualifications (e.g. Dip of teaching, BEd) _____

9. Number of children or dependants in your care? _____

10. Please describe any personal or emotional support networks you have with other people in the space below (e.g spouse, family, friends, work colleagues, or groups: sporting, religious, recreational)

11. On the following scale rate your personal and emotional support network at the present time.
Please circle

0	1	2	3	4	5	6
No Support		Little Support		Moderate Support		Strong Support

12. Age group **Please circle**

20-29 30-39 40-49 50-59 60+

13. Ethnic group **Please circle**

European Maori Polynesian Other (specify)_____

Appendix 4

PHASE THREE : INTERVIEW SCHEDULE FOR: TEACHERS PERCEPTIONS OF THEIR WORKING ENVIRONMENT

By Anna Whitehead

Code:

Date:

Time:

Consent:

Tape No:

Introduction

The purpose of my research is to understand how teachers see the environment they work in. Most teachers in New Zealand have experiences of stress at certain times but their is little up to date information on what contributes to this and what strategies can help alleviate stressful conditions. I hope that through your participation this research will contribute to our understanding of stress and bumout in teaching. For this reason, I'm interested to hear anything that you think is important in relation to this issue.

Consent Form

The research that I am conducting is towards a PhD in Education. I would like to take a minute to explain how the information will be used and give you some assurances about the confidentiality of the information (discuss and complete the consent form).

Teacher's Interview Schedule

Below are the areas which you will be asked about in this interview.

Inside Influences

Stress and Work

1. In general how would you describe your school environment in relation to stress? (i.e.. is this a low stress, medium or high stress environment?)

2. For you individually as a teacher, do you feel under stress at work, or do you find your work relatively stress free?

3. What things in your job cause you the most stress? Can you describe these to me? Could you describe to me two recent events that caused you stress? How did you feel in each of these situations?

4. What typical approach (if any) did you use to deal with these stressful events? Are they effective?

5. If you could change anything about your work environment that would help you reduce stress, what would you do?

6. Have you taught at any other schools? Compared with other schools you have taught at, which school environment do you prefer to work in? Why?

7. Do you feel under pressure working in this school from administrators or others, or do you generally feel little pressure?

8. Is there a demand for you as a teacher to show effectiveness in your work? (Is there a 'hard driving' atmosphere?)

School Culture

1. What is special about your school?

2. How would you describe the atmosphere of this school?

3. Are there any stories told about this school to visitors, or others that reflect the character of this school?

4. Do you have any stories about the history of the school, special 'characters' that add to the flavour of this school?

5. Are there any rituals, or ways of doing things at this school that is different from other schools you have worked at?

Work Load/ Administration

1. Do you find your workload easy or difficult to manage?

2. Can you manage to get all your work demands met within the time required?

3. Are you expected to stay after school to get work finished?

4. How many meetings are you required to attend? Are you expected to attend all of these? How do you feel about this?

5. Do you know what is expected of you as a (beginning/scale a / senior) teacher?

6. Has Tomorrow's Schools affected your administrative demands?

Leadership, Administrators and Decision Making

1. This school seems to make decisions in a collaborative/ non collaborative manner? Is this the way you see it? Do you feel happy about this?

2. As a younger/senior teacher, do you feel you have enough autonomy in making decisions regarding your work?

3. What are the principal's expectations of staff? How do you feel about this?

4. What is the principal's working style like?

5. How do you think the other teacher's in the school perceive the principal?

6. Do you feel you can approach him/her with your problems? How are they dealt with?

7. What hours do most people work?

8. Are creative ideas fostered? Are innovative approaches accepted or valued by the administrative staff?

9. Does the principal encourage teachers to be self sufficient and make their own decisions?

10. Does the principal provide teachers with the knowledge of what is expected in their daily routine, and the rules and policies teachers are to abide by?

11. How does the principal deal with problems?

12. Does the principal check your work and the progress of the children?

13. Does the principal listen to and accept teacher's suggestions?

Rules, Regulations and Expectations

1. Are there lots of rules and regulations when working as a teacher in this school? Can you describe some of these?

2. Are there any unspoken rules and regulations in the school? e.g. doing duties, staying after school, attending meetings, standard of dress, loyalty to staff etc.

3. Are you expected to take on certain responsibilities at school, e.g. committees, after school hour duties
etc?

4. What hours do most staff work?

5. What happens if staff break school rules? What would happen if you were late to work or missed a meeting?

6. Can you wear wild looking clothing, or pierced ears (males) if you want to?

7. Are your goals in teaching clearly defined? Are they clear to you? Are they achievable?

8. Can you be spontaneous in your work? Can you try new teaching methods and materials?

9. Is it all right to have noisy classrooms?

Interpersonal Relationships

1. What is the atmosphere like between staff in the school?

2. Do staff 'get on' with each other?

3. Do staff socialise out of school hours?

4. Do you feel you can ask for help and guidance from fellow staff members? Who would you ask for help?

5. Is there 'team spirit'?

6. How are conflicts dealt with between staff?

7. How do you perceive the relationship of staff with the Board of Trustees?

8. In general, do you find it easy or hard dealing with parents? Do parents attitudes, or values conflict with yours?

Physical Environment

1. Do you find the physical grounds of the school nice to work in?

2. Do you like the staffroom? Is it comfortable?

3. Do you have an office space to work in?

4. Are there adequate facilities for staff? pupils?

4. Lighting: a) Is the lighting in your classroom good?
b) Do the colours and decorations make the place cheerful to live in?

5. Temperature: a) Are the rooms well ventilated or are they draughty?
b) Does it get hot in the classroom?

6. Amenities/Workspace: a) Is your workspace spacious or crowded?
b) Is the furniture in the school well arranged?
c) Does the school need interior decorations?
d) Do you think the school has a stylish or modern appearance?

Outside Influences

1. What outside influences affect your work stress?

2. Has Tomorrow's Schools affected you as a teacher? In what way?

3. Have changes in society (e.g. increase in solo parents, two parents working) had an impact on your school or on you as a teacher?

4. Does the Board of Trustees affect your work as a teacher?

5. Do teacher aides lesson the work load for teachers?

6. Do you feel valued and respected as a teacher in this community?

Appendix 5

Green School Administrative Environment Triangulation Checkpoints

Concept/Value	Field Notes	Interview (out of 4)	Document Analysis
Leadership & Decision Making			
Extreme laissez faire leadership	x	4	
Principal uses a 'cooperative', team based style, with shared decision making	x	4	
Teachers perceive a lack of strong leadership	x	3	
Sharing of goals & vision	x	3	x
Principal listens to pupils & parents	x	1	x
P has warm, caring manner	x	3	x
P not highly respected despite collaborative approach	x	2	
P tries to please & pacify staff	x		
Efficiency			
low efficiency	x	2	
time wasted getting group consensus	x	3	
staff expectations unclear	x	2	
lack of clarity due to vague rules & regulations	x	1	
principal's decision making process 'waffly'	x	3	
school documents not succinct	x		
Work Load			
Very high workload	x	4	
Pressure of shared decision making	x	3	
'Open plan' setting increased pressure	x	3	
Job positions changed overtime	x		
Role Ambiguity & Expectations			
Roles moderately well defined			
Job positions changed over time			
Expectations unclear	x	2	
Teacher's roles unclear	x	2	
P's role ambiguity	x	1	
Autonomy			
teachers had high autonomy	x	1	
teachers used own initiative	x		

Pink School Administrative Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 4)	Document Analysis
Leadership & Decision Making			
Extreme autocratic/dictatorial leadership	x	3	
Principal 'hard driving' i.e. pushes teachers to perform	x	3	
Lack of collaboration by P in decision making	x	3	
Very little delegation		3	
P dictatorial & defensive	x	3	
Lack of professionalism	x	2	
Decisions made prior to staff meetings	x	2	
Staff wary of principal confidentiality	x	3	
Efficiency			
high efficiency	x	3	
hard driving performance expectations	x	3	
teachers feel overburdened due to excessive assessment	x	3	
Role Ambiguity & Expectations			
Teacher's roles unclear at times		2	
Very high expectations from P	x	3	
Parents expectations very high	x	3	
Role conflicts between staff	x	2	
Autonomy			
moderate autonomy in classroom	x	1	
little autonomy in sch decision making	x	2	

Red School Administrative Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 5)	Document Analysis
Leadership & Decision Making			
Strong P leadership	x	4	
Principal uses a consultative style	x	5	
Autocratic on certain issues	x	2	
e.g. safety, health			
P well respected	x	4	x
Highly organised	x	4	x
P has sense of humour	x	4	x
P highlights the positive	x	1	x
P seeks outside support	x	2	x
Efficiency			
principal very efficient & well organised	x	4	
high efficiency in school	x	3	
high efficiency supported by senior management	x	5	
syndicate leaders used helpful strategies	x	2	
Workload			
high workload	x	4	
responsibilities shared	x		
use of standardising to ease workload	x	3	x
Role Ambiguity & Expectations			
Very high & clear expectations	x	5	
Expectations very clear	x	5	
Teacher's duties clearly understood	x	4	
P has high but reasonable expectations of staff	x	3	
Autonomy			
teachers have moderate autonomy	x	3	
variable autonomy in sch decision making	x	2	

Blue School Administrative Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 6)	Document Analysis
Leadership & Decision Making			
Strong P leadership	x	3	
P uses a combination of styles collaborative & autocratic used	x	5	
P considered the 'old style' of leadership - conservative	x	2	
P uses a warm & friendly approach	x	2	
P is well respected but wary of him	x	3	
P is well organised/ tight discipline	x	2	
P & DP have sense of humour	x	2	
DP very helpful and well liked	x	5	
Efficiency			
principal efficient & 'good business head'	x	1	
high efficiency and good planning expected	x	4	
high efficiency supported by senior management	x	5	
syndicate leaders used helpful strategies	x	4	
Work Load			
High workload	x	4	
Responsibilities shared	x		
Use of strategies ease work load e.g. standardised planning	x	3	x
Role Ambiguity & Expectations			
Clear role expectations & duties	x	4	
Parents expectations perceived as reasonable	x	2	
Unspoken rules for school duties		2	
Autonomy			
Principal needs to check all decisions		2	
teachers perceive they have autonomy in teaching		2	
collaborative autonomy in syndicates	x	2	
very little autonomy in major decisions	x	3	

Green School Social Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 4)	Document Analysis
Interpersonal Relationships			
Internal: Coworker Cohesion and Support			
lack of coworker cohesion	x	3	
many negative interactions	x		
aggressive comments, hostility & defensive actions shown	x		
P supportive of staff, but not enough action	x	3	
team support & loyalty shown in syndicates	x	3	
little socialising outside school		2	
low school team spirit	x	2	
External: Board of Trustees			
Parents/Community			
positive interpersonal betwn parents & com	x	3	
parents supportive & helpful	x		
parents welcome in school & classrooms	x	4	x
principal available to parents	x	1	x
consultation with parents & community	x	1	x
fostered staff relationship with BOT unclear			
principal says staff defensive about BOT		1	
Conflict			
conflict & tension visible	x	3	
Some friction among home groups	x	3	
conflict of working styles among senior staff	x	2	
collaborative decision making approach contributed to staff tension	x	3	

Pink School - Social Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 4)	Document Analysis
Interpersonal Relationships			
Internal: Coworker Cohesion and Support			
moderate coworker cohesion	x	3	
many positive interactions	x		
tension & dissatisfaction due to perceived overbearing leadership	x	3	
dissatisfaction among senior staff members and syndicates	x	2	
many defensive comments actions	x	1	
team spirit & loyalty shown in syndicates	x	3	
staff not trustful of senior staff and principal	x	2	
Lack of support from principal	x	3	
Lack of support from senior staff		2	
Lack of support from parents		3	
Syndicate teams supportive of each other	x		
External: Board of Trustees/ Parents/ Community			
principal available to parents	x	1	
mistrust of community		2	
staff relationship with BOT unclear		2	
senior staff feel pressure from BOT		1	
Conflict			
conflict & tension visible	x	2	
conflict between staff	x	2	

Red School - Social Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 5)	Document Analysis
Interpersonal Relationships			
Internal: Coworker Cohesion and Support			
high coworker cohesion	x	3	
many positive interactions	x		
DP disliked and 'tolerated'	x	4	
syndicates had shared goals & vision	x	2	
Strong admin support	x	4	
Strong team spirit & loyalty in syndicates	x	3	
teaching staff appeared happy & content	x	2	
P listens & helps staff to sort out problems	x	4	
Strong cohesiveness among staff	x	4	
Support & guidance given to staff a key feature of Red School	x	4	
Confidentiality from P a high priority	x	5	
Loyalty amongst staff	x	5	
External: Board of Trustees/ Parents/ Community			
staff relationships with BOT satisfactory		2	
teachers felt respected by community		4	
principal saw BOT as positive		1	
principal available to parents	x	3	
parents welcome in classrooms	x	4	
teachers perceived North Shore parents positively but also as critical	x	3	
teachers felt respected by community		4	
Conflict			
low conflict observed	x	2	
humour of principal helped to deflect conflict	x	1	

Blue School - Social Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 6)	Document Analysis
Interpersonal Relationships			
Internal: Coworker Cohesion and Support			
high coworker cohesion	x	3	
cohesive, supportive atmosphere	x		
dissatisfaction with AP		3	
syndicates have strong teamwork	x	2	
team spirit visible	x	2	
principal fosters good relationships		1	
DP supportive and helpful		4	
High support from sen staff especially DP	x	5	
External: Board of Trustees/ Parents/ Community			
parents perceived positively, as being critical and having high expectations		3	
parents welcome in classrooms	x	4	
parents & staff work well together for PTA		1	
principal's relationship with BOT antagonistic		1	
principal sees BOT as unfair at times		1	
teachers felt respected by community		4	
Conflict			
little conflict observed during school visits	x		
principal not aware of any major conflicts		1	
conflict and major tension observed during BOT meetings	x	1	

Appendix 6

Audit Trial: Qualitative Audit by Cathie Collinson PhD.

Re: A Whitehead's qualitative data audit for doctoral thesis
By: Cathie Collinson
Date: 22nd February 2000

The research process conducted by Anna Whitehead was audited by Cathie Collinson. This audit trail included evidence of how the data was collected which included viewing interviews, tape transcriptions, notes taken and completed questionnaires. Also viewed and verbally discussed were how categories were derived (this included coding procedures and verification of themes utilised) and how decisions were made throughout the enquiry. These procedures were similar to those used by Guba and Lincoln (1981) and Dey (1993).

Having completed the audit session, I consider in my professional opinion, that the data collected, the results and interpretations of the analysis made, were dependable and consistent, in other words, that given the data collected, the results made sense. Triangulation was also verified and added to consistency.

Cathie Collinson

Appendix 5

Green School Administrative Environment Triangulation Checkpoints

Concept/Value	Field Notes	Interview (out of 4)	Document Analysis
Leadership & Decision Making			
Extreme laissez faire leadership	x	4	
Principal uses a 'cooperative', team based style, with shared decision making	x	4	
Teachers perceive a lack of strong leadership	x	3	
Sharing of goals & vision	x	3	x
Principal listens to pupils & parents	x	1	x
P has warm, caring manner	x	3	x
P not highly respected despite collaborative approach	x	2	
P tries to please & pacify staff	x		
Efficiency			
low efficiency	x	2	
time wasted getting group consensus	x	3	
staff expectations unclear	x	2	
lack of clarity due to vague rules & regulations	x	1	
principal's decision making process 'waffly'	x	3	
school documents not succinct	x		
Work Load			
Very high workload	x	4	
Pressure of shared decision making	x	3	
'Open plan' setting increased pressure	x	3	
Job positions changed overtime	x		
Role Ambiguity & Expectations			
Roles moderately well defined			
Job positions changed over time			
Expectations unclear	x	2	
Teacher's roles unclear	x	2	
P's role ambiguity	x	1	
Autonomy			
teachers had high autonomy	x	1	
teachers used own initiative	x		

Pink School Administrative Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 4)	Document Analysis
Leadership & Decision Making			
Extreme autocratic/dictatorial leadership	x	3	
Principal 'hard driving' i.e. pushes teachers to perform	x	3	
Lack of collaboration by P in decision making	x	3	
Very little delegation		3	
P dictatorial & defensive	x	3	
Lack of professionalism	x	2	
Decisions made prior to staff meetings	x	2	
Staff wary of principal confidentiality	x	3	
Efficiency			
high efficiency	x	3	
hard driving performance expectations	x	3	
teachers feel overburdened due to excessive assessment	x	3	
Role Ambiguity & Expectations			
Teacher's roles unclear at times		2	
Very high expectations from P	x	3	
Parents expectations very high	x	3	
Role conflicts between staff	x	2	
Autonomy			
moderate autonomy in classroom	x	1	
little autonomy in sch decision making	x	2	

Red School Administrative Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 5)	Document Analysis
Leadership & Decision Making			
Strong P leadership	x	4	
Principal uses a consultative style	x	5	
Autocratic on certain issues	x	2	
e.g. safety, health			
P well respected	x	4	x
Highly organised	x	4	x
P has sense of humour	x	4	x
P highlights the positive	x	1	x
P seeks outside support	x	2	x
Efficiency			
principal very efficient & well organised	x	4	
high efficiency in school	x	3	
high efficiency supported by senior management	x	5	
syndicate leaders used helpful strategies	x	2	
Workload			
high workload	x	4	
responsibilities shared	x		
use of standardising to ease workload	x	3	x
Role Ambiguity & Expectations			
Very high & clear expectations	x	5	
Expectations very clear	x	5	
Teacher's duties clearly understood	x	4	
P has high but reasonable expectations of staff	x	3	
Autonomy			
teachers have moderate autonomy	x	3	
variable autonomy in sch decision making	x	2	

Blue School Administrative Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 6)	Document Analysis
Leadership & Decision Making			
Strong P leadership	x	3	
P uses a combination of styles collaborative & autocratic used	x	5	
P considered the 'old style' of leadership - conservative	x	2	
P uses a warm & friendly approach	x	2	
P is well respected but wary of him	x	3	
P is well organised/ tight discipline	x	2	
P & DP have sense of humour	x	2	
DP very helpful and well liked	x	5	
Efficiency			
principal efficient & 'good business head'	x	1	
high efficiency and good planning expected	x	4	
high efficiency supported by senior management	x	5	
syndicate leaders used helpful strategies	x	4	
Work Load			
High workload	x	4	
Responsibilities shared	x		
Use of strategies ease work load e.g. standardised planning	x	3	x
Role Ambiguity & Expectations			
Clear role expectations & duties	x	4	
Parents expectations perceived as reasonable	x	2	
Unspoken rules for school duties		2	
Autonomy			
Principal needs to check all decisions		2	
teachers perceive they have autonomy in teaching		2	
collaborative autonomy in syndicates	x	2	
very little autonomy in major decisions	x	3	

Green School Social Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 4)	Document Analysis
Interpersonal Relationships			
Internal: Coworker Cohesion and Support			
lack of coworker cohesion	x	3	
many negative interactions	x		
aggressive comments, hostility & defensive actions shown	x		
P supportive of staff, but not enough action	x	3	
team support & loyalty shown in syndicates	x	3	
little socialising outside school		2	
low school team spirit	x	2	
External: Board of Trustees			
Parents/Community			
positive interpersonal betwn parents & com	x	3	
parents supportive & helpful	x		
parents welcome in school & classrooms	x	4	x
principal available to parents	x	1	x
consultation with parents & community	x	1	x
fostered staff relationship with BOT unclear			
principal says staff defensive about BOT		1	
Conflict			
conflict & tension visible	x	3	
Some friction among home groups	x	3	
conflict of working styles among senior staff	x	2	
collaborative decision making approach contributed to staff tension	x	3	

Pink School - Social Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 4)	Document Analysis
Interpersonal Relationships			
Internal: Coworker Cohesion and Support			
moderate coworker cohesion	x	3	
many positive interactions	x		
tension & dissatisfaction due to perceived overbearing leadership	x	3	
dissatisfaction among senior staff members and syndicates	x	2	
many defensive comments actions	x	1	
team spirit & loyalty shown in syndicates	x	3	
staff not trustful of senior staff and principal	x	2	
Lack of support from principal	x	3	
Lack of support from senior staff		2	
Lack of support from parents		3	
Syndicate teams supportive of each other	x		
External: Board of Trustees/ Parents/ Community			
principal available to parents	x	1	
mistrust of community		2	
staff relationship with BOT unclear		2	
senior staff feel pressure from BOT		1	
Conflict			
conflict & tension visible	x	2	
conflict between staff	x	2	

Red School - Social Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 5)	Document Analysis
Interpersonal Relationships			
Internal: Coworker Cohesion and Support			
high coworker cohesion	x	3	
many positive interactions	x		
DP disliked and 'tolerated'	x	4	
syndicates had shared goals & vision	x	2	
Strong admin support	x	4	
Strong team spirit & loyalty in syndicates	x	3	
teaching staff appeared happy & content	x	2	
P listens & helps staff to sort out problems	x	4	
Strong cohesiveness among staff	x	4	
Support & guidance given to staff a key feature of Red School	x	4	
Confidentiality from P a high priority	x	5	
Loyalty amongst staff	x	5	
External: Board of Trustees/ Parents/ Community			
staff relationships with BOT satisfactory		2	
teachers felt respected by community		4	
principal saw BOT as positive		1	
principal available to parents	x	3	
parents welcome in classrooms	x	4	
teachers perceived North Shore parents positively but also as critical	x	3	
teachers felt respected by community		4	
Conflict			
low conflict observed	x	2	
humour of principal helped to deflect conflict	x	1	

Blue School - Social Environment Triangulation Checkpoint

Concept/Value	Field Notes	Interview (out of 6)	Document Analysis
Interpersonal Relationships			
Internal: Coworker Cohesion and Support			
high coworker cohesion	x	3	
cohesive, supportive atmosphere	x		
dissatisfaction with AP		3	
syndicates have strong teamwork	x	2	
team spirit visible	x	2	
principal fosters good relationships		1	
DP supportive and helpful		4	
High support from sen staff especially DP	x	5	
External: Board of Trustees/ Parents/ Community			
parents perceived positively, as being critical and having high expectations		3	
parents welcome in classrooms	x	4	
parents & staff work well together for PTA		1	
principal's relationship with BOT antagonistic		1	
principal sees BOT as unfair at times		1	
teachers felt respected by community		4	
Conflict			
little conflict observed during school visits	x		
principal not aware of any major conflicts		1	
conflict and major tension observed during BOT meetings	x	1	

Appendix 6

Audit Trial: Qualitative Audit by Cathie Collinson PhD.

Re: A Whitehead's qualitative data audit for doctoral thesis
By: Cathie Collinson
Date: 22nd February 2000

The research process conducted by Anna Whitehead was audited by Cathie Collinson. This audit trail included evidence of how the data was collected which included viewing interviews, tape transcriptions, notes taken and completed questionnaires. Also viewed and verbally discussed were how categories were derived (this included coding procedures and verification of themes utilised) and how decisions were made throughout the enquiry. These procedures were similar to those used by Guba and Lincoln (1981) and Dey (1993).

Having completed the audit session, I consider in my professional opinion, that the data collected, the results and interpretations of the analysis made, were dependable and consistent, in other words, that given the data collected, the results made sense. Triangulation was also verified and added to consistency.

Cathie Collinson