

***An Exploratory Study of the Relationship of Demographic
and Personality Factors to Burnout in High School Teachers
in the Pietermaritzburg Area***

by

Heidi Rutsch

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DECLARATION

Unless otherwise indicated in the text, this dissertation represents my own work.

A handwritten signature in black ink, appearing to read 'Heidi Rutsch', written over two horizontal lines.

Heidi Rutsch

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ABSTRACT

The aim of this study was to investigate the relationship of certain demographic and personality factors to the experience of burnout in teachers. A number of other studies recommended the investigation of these variables as possible factors influencing burnout.

Using a sample of 141 teachers from both Private and State schools in the Pietermaritzburg area, certain variables were investigated. The demographic factors included age, gender, marital status, number of children, class size, and type of school. The personality factors included five factors of Neuroticism, Extraversion, Conscientiousness, Openness to Experience and Agreeableness, as measured on the Neo-Five Factor Inventory. Burnout was measured by the Maslach Burnout Inventory.

A Correlation Matrix was used to determine the relationship of the demographic and personality factors to the dimensions of burnout. A Stepwise Multiple Regression Analysis was done to determine which factors related best to the dimensions of burnout. Results indicated that certain aspects of personality and demographic variables such as Neuroticism, Extraversion, age, marital status, number of children, type of school, and class size were significantly related to the components of burnout.

The research findings indicated that younger teachers are more prone to burnout than older teachers; that single teachers experience more stress and burnout than married teachers; and that having children acts as a buffer against stress and burnout. Male and females did not appear to differ in their experience of burnout. Of the personality variables explored, people scoring high on Neuroticism and low on Extraversion were found to be prone to burnout.

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CHAPTER 1

INTRODUCTION

1.1 Background to the Study

Interest in the phenomenon of burnout has increased steadily since the early 1900's (Basson, in Black, 1991). The term, burnout, originally used by Freudenberger (1983) to describe health care workers who were physically and psychologically burnt out, is now commonly associated with the broader field of human service professionals such as teachers, social workers, therapists, and the like. Essentially, burnout is a "syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind" (Maslach, 1982a, p3). It is a response to the emotional strain of dealing extensively with other human beings and thus could be considered a type of job stress. However, what is unique about burnout is that the stress arises from the social interaction between helper and recipient (Maslach, 1982a).

Teacher burnout is a topic that has received international attention. Stressful conditions within the profession such as low salaries, unmotivated students, disadvantaged students, heavy workloads, new and unfamiliar syllabi, and an uncertain professional environment, have all been suggested as contributing to what is referred to as burnout, and to some teachers leaving the profession (Huston, 1990). As so many changes have (and are) taking place in South African schools, the demands on the teacher have increased considerably. Also, with the changes in the demographic composition of class groups, and increasing numbers in the classroom, it is possible that teachers will find it more difficult to tend to the needs of pupils. In other words, teachers have a difficult job in adapting to the changes, while still maintaining their high standards of teaching. Consequently, teachers "get overly involved emotionally, over - extend themselves and feel overwhelmed by the emotional demands imposed by others. The response to this situation is emotional exhaustion" (Maslach, 1982a, p.3). Furthermore, depersonalisation may result where the teachers fail to provide the same standard of service they once provided, and may then begin to experience feelings of guilt for not doing their best.

Factors inherent to the work context that potentially lead to burnout have been well-researched. However, individual factors contributing to the experience of burnout, have been less well-researched (Fontana and Abouserie, 1993). There is, in

consequence, a need for research designed to identify the particular variables, such as personality and demographic variables, which may influence certain individuals to be more prone to experiencing burnout than others (Maslach, 1982a; Rigby, 1989; Black, 1991). A study by Kyriacou and Sutcliffe (in Fontana and Abouserie, 1993) revealed that the response of teachers to the demands faced by them will depend to a large extent upon the interaction between the teachers' individual characteristics (personality traits, biographical details) and the teachers' perception of these demands. Schwab (1986) and Capel (in Fontana and Abouserie, 1993) suggest the need to identify teacher characteristics as a way of arriving at predictor variables, and also as a way of understanding why certain individuals succumb to professional pressures more readily than others.

A useful approach to these characteristics is that of Costa and McCrae (1992) who classified personality traits into five broad domains - Neuroticism, Extroversion, Openness to Experience, Agreeableness, and Conscientiousness (These will be elaborated on in chapter two). The present study attempts to investigate whether individuals with certain personality characteristics, taking into account demographic and situational variables, experience significantly greater levels of teacher stress than do others.

1.2 **Objectives:**

The study is exploratory in nature, and therefore, no formal hypotheses have been formulated. The objectives are as follows:

1. To examine the relationship between the dimensions of burnout and personal demographic factors of age, gender, marital status and family status.
2. To examine the relationship between the dimensions of burnout and situational factors of the type of school and the average number of pupils taught per class.
3. To explore the possible relationship between personality differences to the experience of the three dimensions of burnout.

1.3 **Definitions of Stress**

Cox and Mackay (1978) writes that the “concept of stress is elusive because it is poorly defined. There is no single agreed definition in existence” (p.1). Stress is typically defined in terms of 1) external environmental stimulus characteristics; 2) individuals’ emotional states; or 3) an interaction variable emphasising the relationship between individuals and their environments (Cox and Mackay, 1978; Boyle, Borg, Falson and Baglioni, 1995).

The first approach, known as the Engineering model (Boyle, et al., 1995), describes stress in terms of the stimulus characteristics of those disturbing environments, thus treating stress as an independent variable (Cooper, 1983). This stimulus based model accounts for stress in terms of physical, external events or conditions which press upon the individual (Arsenault and Dolan, 1983; Dunham, 1992; Boyle et al., 1995).

The second approach, referred to as the Physiological model, treats stress as a dependent variable, describing it in terms of the person’s response to disturbing environments (Cox, 1978; Seyle, in Arsenault and Dolan, 1983).

Although these stimulus and response approaches all appear to reflect specific aspects of stress, neither includes a comprehensive account of both individual and environmental factors (Dunham, 1992; Boyle et al., 1995). In other words, they do not offer an explanation of how the personal and environmental variables relate, and what the strength and nature of the relationships are. Cox and Mackay (1978) describe the third approach, which views stress as the reflection of a “lack of fit” between the person and the environment. Stress in this form is studied in terms of its antecedent factors and its effects. In other words, it is an intervening variable between stimulus and response (Lazarus, 1966; Arsenault and Dolan, 1983). This interactional approach “expresses the view that stress arises through the existence of a particular relationship between the person and his environment” (Cox and Mackay, 1978, p.17). Recent reviews of the literature indicate that this definition is growing in popularity (Blau, in Arsenault and Dolan, 1983).

1.4 **Burnout**

As with the term ‘stress’, the concept of burnout is difficult to define simply (Maslach, 1982a; Friesen and Sarros, 1989). Maslach (1982a) considers three core elements to burnout:

“Firstly, that burnout occurs at an individual level. Secondly, that burnout is an internal psychological experience involving feelings, attitudes, motives, and expectations. Thirdly, that burnout is a negative experience for the individual, in that it concerns problems, distress, discomfort, dysfunction, and /or negative consequences” (p. 32).

In most definitions, exhaustion is the most dominant dimension (Kyriacou and Sutcliffe, 1978; Maslach, 1982a; Friedman, 1993; Pretorius, 1994). Although this exhaustion is often a physical one, more often an emotional exhaustion is described as central to burnout (i.e. a loss of feeling and concern, a loss of trust and a loss of interest).

A second dimension of the many definitions is a negative shift in responses to others (i.e. depersonalisation, negative or inappropriate attitudes towards others, frustration and irritability) (Kyriacou and Sutcliffe, 1978; Maslach, 1982a; Friedman, 1993).

A third dimension found in the definitions is a negative response toward oneself and one's personal accomplishments, also described as depression, low morale, withdrawal, reduced capability and an inability to cope (Freudenberger, 1983; Cedoline, 1982; Maslach, 1982a; Fontana and Abouserie, 1993).

Black (1991) and Cooper (1995) comment that burnout has come to refer to the effects of occupational stress, and that burnout is a gradual process. The symptoms of burnout are the subjective experience of being worn out, being estranged, and working harder, but achieving less. The reason for this occurring may be that the individual directs all his/her energy towards managing the stress, leaving limited or no resources for occupational effectiveness (Black, 1991). Since the condition progresses gradually, it can be said to be a chronic condition. Black(1991) points out that early symptoms are often ignored, and positive intervention is attempted only once the individual is no longer able to manage the stress.

Those affected by burnout are often competent and able people, and in particular, burnout is found in the helping professions, such as teaching, policing, counselling and nursing (Cook, in McKenna, 1994). Maslach and Jackson (1981a) point out that their research has revealed the consequences of burnout to be dangerous for workers, their clients, and the institutions in which they operate.

1.5 The Relationship between Stress and Burnout

Farmer (in Black, 1991) mentions that although the concepts of “stress” and “burnout” are often equated in the literature, they are not the same. He says that burnout is the result of unmediated stress (i.e. having no ‘buffer’ or support systems). Although stress can lead to burnout, not all people who are stressed experience burnout (Brill, in Black, 1991). This leads one to believe that burnout is the final step in the progression of unsuccessful attempts at coping with a number of stress conditions. Stress to some, can be a motivating factor on which they thrive, however, once the person can no longer cope with this stress and it no longer serves in their favour, they may experience burnout (Adams, 1981).

1.6 Personality

Central to the concepts of stress and burnout is the individual human response and, therefore, the notion of personality. Personality has been defined in many different ways, but common to most of these definitions, has been their reference to characteristic patterns of behaviour, thoughts and emotions of the person (Lazarus, 1966; Kaplan, 1983; Boyle, et al. 1995) “What a person brings to a situation is just as critical as what the situation brings out of him/her” (Maslach, 1982b, p.57).

Theories of personality have focused predominantly around three notions:

1. Trait theories, which define personality as consisting of qualities that are consistent over time and in various situations;
2. Situationalist approaches, which view personality as being influenced by situational variables;
3. Interactionist approaches, which view personality as resulting from a mutual interaction of disposition and situation.

This study has largely been informed by the Trait approaches to personality, where common features of individuals are determined. However, the interactionist perspective has also been considered, which asserts that it is both the circumstances as well as the disposition which would encourage a person to experience stress. One can also go further and suggest that a person, through a particular type of involvement with the environment, may create the stressful condition. As Garrity, Somes and Marx

(in Schwartz, 1987) suggest: "Personality traits may predispose one to more or less life change, especially the sort which comes directly under voluntary control such as change of residence or job" (p. 40).

It appears then, that personality is related to burnout (Gann; Heckman; and Nowack and Hanson, in Maslach and Jackson, 1986). Maslach and Jackson (1986), Mills (1986), Rigby (1989), and Black (1991) feel that more research is needed to determine the most significant personality variables that relate to burnout. This study attempts to identify personality attributes which may influence the experience of stress and burnout.

1.7 Overview of the study by chapter

CHAPTER 1: Introduction: A brief summary of issues relevant to the study are presented.

CHAPTER 2: Literature Review: Relevant models and previous research findings give a rationale for exploring certain issues in this study.

CHAPTER 3: Methodology: An account of the research design with the aims, research procedure, instrumentation, and selection of subjects is given.

CHAPTER 4: Results: The findings of the research are presented with graphs and tables to facilitate analysis.

CHAPTER 5: Discussion: The results of the research, as well as other studies mentioned in chapter 2, are discussed in relation to the objectives of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

To provide a theoretical framework for the study to follow, models of stress and burnout are considered. Thereafter, a model of personality is explored, and finally, research on stress and burnout related to teaching is summarised, leading to a rationale for the study.

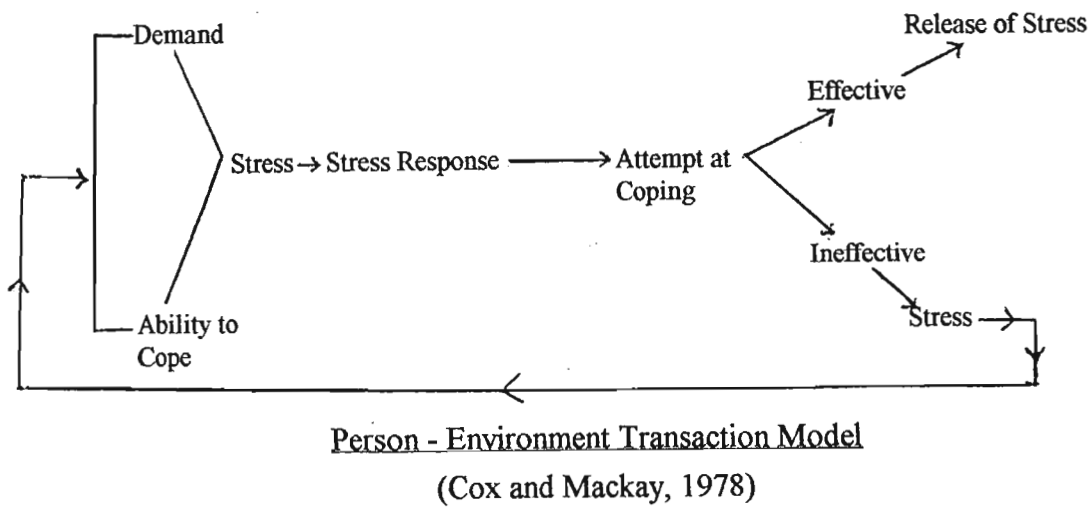
2.2 Models of Stress

Stimulus and Response based models were briefly mentioned in chapter one. As these are considered to be too narrow in focus for this study, they will not be expanded on. However, the Transactional model is considered a more comprehensive and relevant model and will therefore be explored further.

2.2.1 Cox and Mackay: *Person - Environment Transaction Model*

Cox and Mackay (1978) suggest that stress can be adequately described as “part of a complex and dynamic system of transaction between the person and his environment” (p. 18). This description of the stress system draws from both response- and stimulus-based definitions, but in so doing, it emphasises the ecological and transactional nature of the phenomenon of stress. It suggests that “stress is an individual perceptual phenomenon rooted in Psychological processes. It also draws specific attention to the feedback components of the system” (Cox and Mackay, 1978, p. 18). The feedback component of the system implies that it is a cyclic, rather than a linear model.

The following flow diagram summarises the above model:



This model is one of the conceptual frameworks within which this study is based, informing its understanding of the stress process.

According to Adam (1981), “stressors are either episodic disruptions or chronic conditions which cause one’s autonomic nervous system and endocrine gland system to disrupt one’s normal biophysical equilibrium in preparing one to ‘fight or flight’ (p. 56). Fighting or avoiding the situation are seldom appropriate responses in today’s world. As a result, this stress response energy is turned inward, eventually creating ‘strain responses’ such as irritability, depression, sleep problems, high blood pressure, and indigestion. These responses are important warning signs that one’s stress levels are becoming too high. Although stress is often needed to motivate one to perform at one’s best, one needs to be aware of when one is reaching ‘burnout’ threshold. If one does not attend to these warning signs, one’s health, productivity and psychological well-being will suffer. Figure 1 below illustrates that one needs stress to function well, but that functioning falls off quite quickly beyond an individually unique threshold (Adams, 1981).

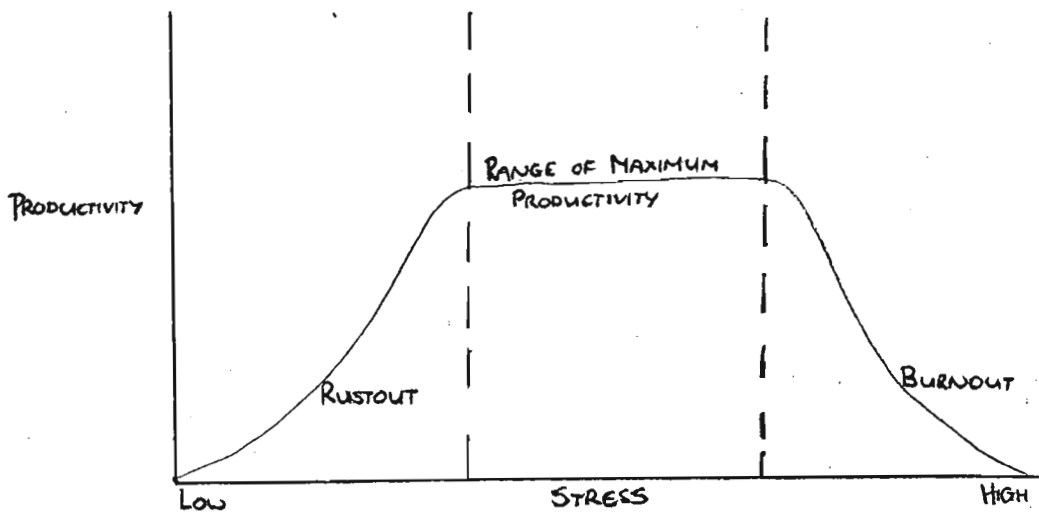


Figure 1
The Path of Stress
 (Adams, 1981, p.57)

Lazarus (1966) notes that “stress reactions appear to be the result of conditions that disrupt or endanger well-established personal and social values of the people exposed to them. The stimulus conditions are therefore identified as situations of stress” (p. 4). However, stress cannot be defined exclusively by situations, because the capacity of any situation to produce stress reactions depends on characteristics of the individual. The important role of personality factors in producing stress reactions requires that stress be defined in terms of transactions between individuals and situations, rather than of either one in isolation (Lazarus, 1966; Kaplan, 1983; Singer and Davidson, in Monat and Lazarus, 1991).

The manner in which our conceptions of the limits of stress are built up is to start from the obvious and unequivocal instances and extend the analysis to similar conditions which are increasingly less severe or obvious. Thinking of stress as a continuum, the lower borderlines are most difficult to identify. The approach is also, at first, circular in that the stress stimulus is defined by the reaction, and the stress reaction is, in turn, defined by its relationship with the stress stimulus. Therefore, when one observes a stimulus condition that has been defined as a stress, but one does not observe stress reactions, one begins to look for factors that would account for this discrepancy. Similarly, when one observes stress reactions, one assumes that these were brought about by stress conditions and one looks for them in order to understand the reaction. Although this circularity may be adequate, one needs to be able to specify the precise conditions of the reaction (Lazarus, 1966) In other words, be able to say in advance which condition is sufficient to produce stress reactions.

2.3 Theories of Burnout

Maslach and Jackson (1981a) suggest that burnout can result in poor quality service; negative affects, high turnover, absenteeism, and low morale. The authors' research also suggests that burnout is significantly correlated with the experience of "personal dysfunction, including physical exhaustion, insomnia, increased use of alcohol and drugs, and marital and family problems" (Maslach and Jackson, 1981a, p.100).

Empirical studies of psychological burnout have tried to identify individual characteristics that are associated with higher levels of psychological burnout. The question of why certain people become ill and others do not under similar stressful conditions is being pursued by several research projects. The University of Chicago (Kobasa and Maddi, in Cedoline, 1982) studied middle and upper level executives at a public utility whose officers were worried about the level of employee stress. Among managers who said they had experienced life crises of a degree that would ordinarily produce high levels of stress, the researchers found distinct differences between those who subsequently became ill from high blood pressure, ulcers, etc. and those who remained healthy. The 'hardy' managers seemed to have a greater sense of control over their lives and a commitment to themselves. They viewed change as a challenge. In contrast, stress-susceptible managers seemed to have an aversion to change and did not have the same sense of control over their lives.

Although most theories of burnout claim the sources of burnout to be either environmental or individual, few have attempted to integrate the two. Recent literature, however, accepted that the sources of burnout can be the result of individual, environmental, and organisational factors. The Ecological Model acknowledges this and adopts a more systemic approach to burnout (Carroll and White, 1982).

2.3.1 The Ecological Perspective

Since burnout is a work related concept, the work environment generally receives considerable attention in the literature. However, other environments or ecosystems can and do play an important role in determining whether or not, to what degree, and in what fashion a person will experience burnout.

According to this perspective, burnout is viewed as a form of ecological dysfunction (Carroll and White, 1982). "Ecology concerns the inter-relationship of organisms or

ecosystems” (Carroll and White, 1982, p. 41). This implies that the person, his/her ecosystems, and the reciprocal impact each has on the other must be understood (Cooper and Marshall, 1976; Farber, 1983; Mills, 1986; Singer, Neale and Schwartz, 1989).

Using the work of Bronfrenbrenner (1979) one can depict the individual’s work environment as containing the person and environmental components (i.e. microsystems, mesosystem, exosystem and macrosystem (see Figure 2).

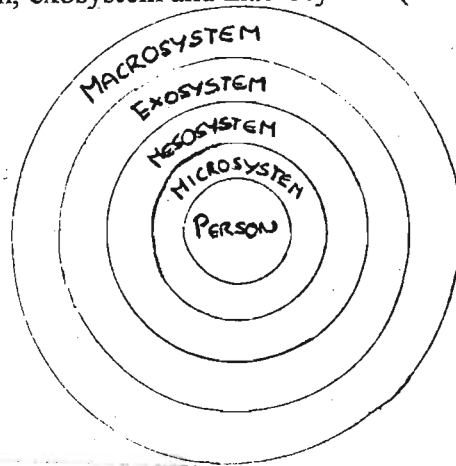


Figure 2

An Ecological Model for the Analysis of Burnout

(Bronfrenbrenner, 1979)

Anything that can influence a person’s work performance must be considered and evaluated. For example, physical and mental health status; level of education; frustration tolerance; goals; needs; interests and values.

The microsystem pertains to the smallest organised ecosystem within which the person performs most of his/her work (such as the office, home, classroom). The mesosystem represents the next level of organisation of the work environment. It encompasses all of the microsystems that together form a larger whole (e.g. all of the offices that comprise the business; or all the classrooms that make up the school). The exosystem encompasses those elements of the larger environment that impinge most directly and frequently on the mesosystem. For example, a schools’ exosystem would include the school board, the surrounding community, and the local legislative bodies. The macrosystem includes elements that are larger, more impersonal, more distant and global than those of the micro-, meso-, and exosystems. The influence of the macrosystem, moreover, is often experienced more indirectly. Examples of macrosystem’s influences that may lead to burnout include: economic conditions impacting on retrenchment rates; high interest rates; policy making and natural

disasters (Carroll and White, 1982). Teachers are not in the position to influence the above and therefore, as Bundy (1981) says: “When professionals see themselves as being locked into a limited range of income potential and having few opportunities to participate in policy-making, they begin to feel powerless and frustrated, and burnout is likely to be the result” (p. 10). Sparks, (in French, 1993) agrees with this sentiment saying that, “the stage is set for job-related stress when involvement in work is high (as in teaching), but feelings of control or power in the work setting are limited (p. 66).

2.4 Stages of Burnout

Figure 3 shows the stages of burnout represented as a steep path.

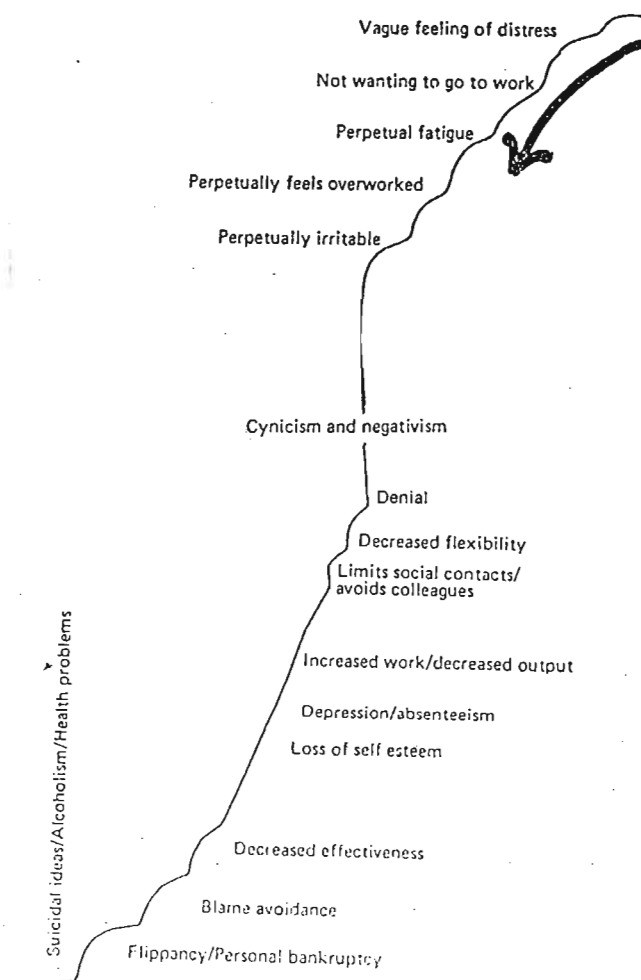


Figure 3
Stages of Burnout
(Willings, 1992)

Most people occasionally feel they would much rather do something else than go to work. Everybody feels fatigued, overworked, and irritable at times, but it is when one feels like this all the time, that one must realise that burnout is possible. A further sign of impending burnout, is when the person becomes cynical and negative in all situations which is often out of character. Denial then follows which confuses those close to the person. The person may be looking ill, but claiming to be “never better”. What follows in the stages of burnout are the results of feeling burnt out. In other words, one limits contacts with friends and colleagues; more work is done, but less achieved; the person may experience depression, absenteeism and lack self-esteem. Ultimately, the person may express suicidal ideas, complain of health problems, or begin drinking excessively.

Another model based on the Maslach Burnout Inventory (MBI) was put forward by Golembiewski, et al. (Mills, 1986). This model has three phases:

- Depersonalisation
- Reduction in Personal Accomplishment
- Emotional Exhaustion

However, support for this model was not conclusive and required further research. Edelwich and Brodsky (in Mills, 1986) explain that when considering the stages of burnout, the progression is more cyclic than linear. In other words, the individual may experience the cycle a number of times with intervention at any point being possible. However, intervention at the final stages may be more difficult.

2.5 Occupational Stress and Burnout

2.5.1 Definition of Occupational Stress

Jones and Dubois (1989) define occupational stress as “the adverse emotional and physical reactions employees have to any source of pressure in their environment. These stress reactions negatively affect personal health and organisation effectiveness and often create losses” (p. 46). Cedoline (1982) defined occupational stress as a “by-product of an interaction between workers and their environments” (p.13).

2.5.2 The Role of Stress in the Occupational Context

It has already been said that the phenomenon of burnout has come to be associated with occupational stress specifically (Cooper, 1995; Black, 1991). Although one still

finds these terms being used and perceived as distinct (e.g. in Chan and Hau, in Cooper, 1995), the terms Burnout and Occupational Stress are often used interchangeably.

The study of stress at work is becoming increasingly prominent in behavioural science research (Arsenault and Dolan, 1983; Cooper and Kelly, 1993). Three possible reasons for this have been suggested by Arsenault and Dolan (1983): Firstly, that occupational stress has been found to be related to the “aetiology of a number of physical conditions such as coronary heart disease, peptic ulcers, hypertension and diabetes” (p. 227). Secondly, Occupational Stress has been recognised as resulting in poor employee performance, organisational ineffectiveness, and increased employee absenteeism and turnover (Cox and Mackay, 1978; Maslach and Jackson, 1981a Arsenault and Dolan, 1983; Kaplan, 1983). The third reason deals with the indirect outcomes of occupational stress in terms of economic loss caused by workers’ compensation and rehabilitation (Arsenault and Dolan, 1983; Jones and Dubois, 1989). A fourth reason given by Cooper and Kelly (1993) could possibly be added: many occupations are undergoing transformation and change, thus increasing levels of stress. One occupation which has undergone enormous legislative and occupational change during the last five years or more is the teaching profession.

2.6 Models of Occupational Stress

While accepting some of the thinking behind the Ecological model, this study has made more specific use of Cooper (1983) and Hurrell’s (1989) conceptualisations of occupational stress.

2.6.1 Cooper’s Model of Occupational Stress

From the available research literature exploring occupational stress, Cooper (1983) developed a simple model (Figure 4) which is of functional value to this study because it facilitates conceptualisation of the possible sources of occupational stress.

Most research indicates that depending on the particular job, one or some combination of the sources of stress in this model, together with certain personality traits, may be predictive of a variety of stress manifestations (such as mental ill health, job dissatisfaction, alcoholism, or marital disharmony) (Cooper, 1983). The six major sources of occupational stress include: factors intrinsic to the job; role in the

SOURCES OF STRESS

Intrinsic to the job

Role in the organisation

Relationships at work

Career development

Organisational structure and development

Home work interface

Individual

SYMPTOMS OF STRESS

Individual symptoms
Raised blood pressure
depressed mood
excessive drinking
irritability
chest pains

Organisational symptoms
High absenteeism
high labour turnover
Industrial relations difficulties
poor quality control

DISEASE

Coronary heart disease
mental illness

Prolonged strikes
Frequent and severe accidents
Apathy

FIGURE 4

COOPER, (1983 p370)

organisation ; career development ; relationships at work; organisational structure and climate; and home - work pressures (Cooper, 1983).

It must be noted, however, that this is a linear model, not a transactional one, and as a result does not account for the nature and strength of the various relationships.

2.6.2 Hurrell's Model of Occupational Stress

Hurrell's (1989) model is a transactional model involving complex interactions and feedback systems. Components of this model include: Job stressors (organisational factors, job task demands); individual factors (personality, stage of career development); non-work factors (financial status and family situation); buffer factors (social support and coping); acute reactions (Psychological and behavioural); and illness. Job stressors compound to produce acute reactions, however, this relationship may be mediated by non-work factors, buffer factors and individual factors. Interactions and feedback possibilities between all variables at all levels is accounted for in this model. The model, although difficult to operationalize, is useful in understanding the complex and dynamic nature of occupational stress.

2.7 Sources of Occupational Stress

Using Cooper's (1983) model (Figure 4) as a framework, the literature on the sources of occupational stress will briefly be presented.

2.7.1 Potential Occupational Stressors

Factors intrinsic to the job:

- * Poor physical working conditions (Cedoline, 1982; Maslach, 1982; van der Merwe, 1993)
- * job overload/underload (Cedoline, 1982; Maslach, 1982b; Pines, in Mills, 1986).

Role in the organisation:

- * Role ambiguity about one's job and role conflict (Cedoline, 1982; Farber, 1983; Dunham, 1983; Schwab, 1986; Golownowski and Cooper, 1983; Pines and Aronson, 1988; Huston, 1990; Burke and Greenglass, 1993; van der Merwe, 1993; Byrne, 1994)

- * Role overload/underload - constant interaction with clients (Cedoline, 1982; Maslach, 1982b; Schwab, 1986; Holland, in Mills, 1986; Pines and Aronson, 1988; Burke and Greenglass, 1993).
- * Responsibility for others (Blase, 1982; Cedoline, 1982; McConnell, in Mills, 1986).

Relationships at Work:

- * nature of relationship and social support from others (Kyriacou and Sutcliffe, 1978; Pines, 1982; Maslach, 1982b; Pines and Aronson, 1988; Huston, 1990; van der Merwe, 1993; Byrne, 1994).
- * Lack of feedback and rewards (Cedoline, 1982; Maslach, 1982; McConnell, in Mills, 1986; Pierce and Molloy, 1990; Willings, 1992; Cooley and Yovanoff, 1996).

Organisational Structure and Climate:

- * Lack of communication (Maslach, 1982b; Cedoline, 1982)
- * Uninvolvement in decision making (Bundy, 1981; Cedoline, 1982; Pines, 1982; Schwab, 1986; Pines and Aronson, 1988).
- * Conditions of service (Payne; Goodall and Brown; Grossnickle; in Rigby, 1989).

Work Interface with home and society:

- * Work - home interface/ Home - work interface (Cedoline, 1982; McConnell, in Mills, 1986; van der Merwe, 1993).

Having presented the sources of burnout found in other studies, the potential sources of stress investigated in this study will be discussed in light of previous research findings.

2.7.2 Demographic factors and Burnout

Maslach and Jackson, in their 1976 survey, gave the Maslach Burnout Inventory to a wide range of human services professionals from various parts of the United States (Maslach, 1982b). The main aim of this survey was to establish which demographic factors related to burnout.

2.7.2.1 Gender

Maslach and Jackson's (1981a) study revealed that on the whole, men and women differ little in their experience of burnout. The differences (which are very small) are that women tend to experience more emotional exhaustion than men, while men are

likely to have depersonalised and callous feelings about the people they work with. Maslach (1982b) speculates that women are generally supposed to be very emotional people, while men are supposed to be hard, tough and unemotional. With this in mind, women are more likely to get emotionally involved with people and therefore run a greater risk of emotional exhaustion. Men, on the other hand, are less oriented toward closer contact with people, and therefore may be more prone to exhibit depersonalisation.

Long (1990) found that women were more likely to perceive interpersonal conflicts as stressful than were men, yet women also perceived the work environment as being more interpersonally supportive. Bernard (in Pines and Aronson, 1988) found that women in mid-career who have both a job and a family had the most satisfaction from their lives and work. They felt that despite the fact that they did not have time for themselves, they had more variety, autonomy and a sense of importance. However, when these women were compared to men, the findings showed that women were at a disadvantage, especially with regards to their work conditions.

2.7.2.2 Age

There is a clear relationship between age and burnout (Maslach and Jackson, 1981a; Maslach, 1982b). Burnout occurs more in younger than older people. Maslach and Jackson (1981a) found that younger subjects scored higher than older subjects on emotional exhaustion and depersonalisation (as measured by the Maslach Burnout Inventory) with a consistent decline in scores as a function of age group. Younger people usually have less work experience than older ones, making them more prone to stress. Furthermore, with increased age, people are more stable and mature, have a more balanced perspective on life, and are less prone to the excesses of burnout. They may also have the support of a family which younger teachers may not have.

Maslach and Jackson, (1981a) and Maslach (1982b) also mentions that in many of their studies, people have claimed that the first experience of burnout was likely to happen in the first few years of one's career. If people have difficulty in dealing with burnout at this point, when they are younger and newer to the job, they may leave the profession entirely. These people will therefore not be available to answer questions about the emotional strain of their work five or ten years later.

2.7.2.3 Marital Status

Burnout appears to have a consistent relationship with marital status (Maslach and Jackson, 1981a; Cedoline, 1982). Single people seem to experience the most burnout, while those who are married experience less burnout. People who are divorced generally fall in between these two groups; they are closer to the singles in terms of higher emotional exhaustion, but closer to the marrieds in terms of lower depersonalisation and greater sense of accomplishment (Cedoline, 1982).

2.7.2.4 Number of Children (Family Status)

Just as being unmarried is associated with a greater risk of burnout, so is being childless. Although one may suggest that children are an additional emotional burden (which should exacerbate burnout), burnout occurs less in professional helpers with families.

Several reasons could account for people with families being less vulnerable to burnout. Firstly, they tend to be older, more stable, and psychologically mature. Secondly, their involvement with a spouse and children makes them more experienced in dealing with personal problems and emotional conflicts. Thirdly, a family is often an “emotional resource, rather than an emotional drain” (Maslach, 1982b, p.61). The love and support of family members help the individual cope with the emotional demands of work. Finally, the person with a family has a different view of the job than does the person who is single. The family man or woman does not depend so heavily on the job as a source of his/her personal social life. Since the family fulfils many of the person’s needs for affection and approval, there is less need to seek personal gratification from clients (and thus to get emotionally entangled with them).

2.7.2.5 Average Number of Pupils Per Class

This will be discussed in 2.9.5.1.

2.7.3 Personality Characteristics

Personality factors that are considered to relate to burnout include the inability to set limits (Maslach, 1982b) tendency to become over-involved (McConnel, in Mills, 1986), introverted (Cedoline, 1982), anxiousness and neuroticism, flexibility/too

accommodating, status oriented (Cedoline, 1982; Maslach, 1982b) and have Type A characteristics such as being intolerant and impatient (Maslach, 1982b; Farber, 1983).

Research into the area of personality and burnout is limited and often inconclusive. Maslach (1982a) found that a relationship between personality and burnout did exist, but it was not convincing. Van der Merwe (1993), in a study of student nurses, found personality to play a significant role in the stress system. Although Black (1991) did not investigate the role of personality in his study on burnout in Educational Psychologists, he recognised the need for including such variables in future research in terms of investigating the 'buffer' effect personality may have on stress. This would appear necessary considering Arsenault and Dolans' (1983) findings that personality has a significant effect on job stress and performance.

2.8 Model of Personality

2.8.1 The Five Factor Model of Personality

Sir Francis Galton may have been the first scientist to recognise that the most important individual differences in human transactions will eventually be encoded as single terms in all of the world's languages (ie. he recognised the lexical hypothesis) (Goldberg, 1993).

The traits that define this model - Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness - have consistently emerged in factor analysis of trait ratings and questionnaire data. These five factors represent higher order traits that reflect general dispositions where an attempt was made to explain individual differences with the fewest, yet most broadly applicable dimensions (Goldberg, 1993). The model has been identified in diverse subject populations in varying situations, and therefore McCrae and Costa (1986) have asserted that the five-factor model provides a basic taxonomic structure for personality research.

One major area of research included the lexical tradition (Costa and McCrae, 1992; Goldberg, 1993) which began with an analysis of trait adjectives found in English and other natural languages (Briggs, 1992). Words such as accommodating, energetic, nervous and careful evolved over centuries to enable individuals to describe themselves as well as others. Drawing mainly on the work of Cattell, Guilford and Eysenck, Costa, McCrae, and Holland, (1984) argued that many of the traits usually studied in isolation can best be understood as aspects of five dimensions. The development of

the Big Five Factor structure and its growing acceptance by personality researchers has profoundly influenced the scientific study of individual differences (Goldberg, 1993). Paradoxically, the present popularity of the model owes a lot to its critics. The two most famous critics include Cattell and Eysenck. Cattell feels there are more than five factors involved in personality, while Eysenck feels there are fewer (Goldberg, 1993). In criticising Goldberg's (1993) article, Cattell (1995) writes that, "it is a piece of free-flowing writing appealing to those untrained in 'state-of-the-art' multivariate experimental psychology" (p. 207). Cattell (1995) feels that if all rating and questionnaire researchers begin with an adequate dictionary of personality sphere variable, and utilise sophisticated exploratory factor methods, then all researchers should conclude with the same basic traits. Once this has been achieved, one can begin to understand these traits that Cattell feels will provide a basis for a scientific personality theory.

Cattell has often claimed to have identified at least a dozen oblique factors. However, only five factors proved to be replicable when analysed by others (Goldberg, 1993). Similar five factor structures based on other sets of variables have been reported by other researchers (eg. Costa and McCrae (1986); and Goldberg (1993).

The Neo-Personality Inventory - Revised (Neo-PI-R) was developed to operationalise the five factor model of personality, a representation of the structure of traits which was developed and elaborated over the past four decades (Digman, in Costa and McCrae, 1992; Goldberg, 1993).

Since 1985, research using the Neo-PI has demonstrated that the same five factors can account for the major dimensions in personality questionnaires designed to measure Jungian functions, Murray's needs, and the DSM-III-R personality disorders (Costa and McCrae, 1992). It appears that these factors are indeed comprehensive.

Goldberg (1993) emphasises that five factor theorists never intended to reduce personality to a mere five traits, but instead aimed to provide a "scientifically compelling framework in which to organise the myriad of individual differences that characterise humankind" (p. 26).

Factors are defined by groups of intercorrelated traits (Costa and McCrae, 1992) which are referred to as facets. Each cluster of facets is referred to as a domain. By describing the individual's position on each of the five domains, a comprehensive summary of a person's emotional, interpersonal, experiential, attitudinal and

motivational styles can be provided. Neo-PI-R domain scales and factors measure personality at this level, whereas facets scales offer a more fine-grained analysis by measuring specific traits within each of five domains. This study considers the five domains only (The reason for this is discussed in chapter three).

2.8.2 The Five Domains

2.8.2.1 Neuroticism (N)

“The most pervasive domain of personality scales contrasts adjustment or emotional stability with maladjustment or Neuroticism (N)” (Costa and McCrae, 1992, p. 14). The Neuroticism domain includes experiences of negative affects such as fear, sadness, embarrassment, anger, guilt, and disgust (Watson and Clark, 1992), and as a result the neurotic may be more likely to experience illness or suicidal ideation due to this negative affect (Magnus, Diener, Fujita and Pavot, 1993). However, Neuroticism includes more than susceptibility to psychological distress. Perhaps because disruptive emotions interfere with adaptation, people high in Neuroticism are also prone to have “irrational ideas, to be less able to control their impulses, and to cope more poorly than others with regards to stress” (Costa and McCrae, 1992, p. 14). Magnus, et al. (1993) found that neuroticism predisposed individuals to experience more adverse life events. Following from this, a neurotic may avoid certain situations because they cause anxiety, but the avoidant behaviour may cause bad events such as being fired from one’s job.

As the name suggests, patients suffering from neuroses tend to score higher on measures on Neuroticism (Eysenck, 1952 and 1977), but the Neuroticism scale of the Neo-PI-R, like all its other scales, measures a dimension of normal personality (Costa and McCrae, 1992). “Individuals who score low on Neuroticism are emotionally stable. They are usually calm, even-tempered, and relaxed and able to face stressful situations without becoming upset” (Costa and McCrae, 1992, p.15). Ormel and Wohlfarth (in Magnus, et al., 1993) reported that neuroticism predisposed individuals to experience psychological stress. Fontana and Abouserie (1993) found a significant correlation between Neuroticism (measured on the Eysenck’s Personality Questionnaire)(see 3.6.3) and stress (i.e. the person who is anxious, worrying, moody, depressed, may not be suitable for a potentially stressful occupation such as teaching).

2.8.2.2 Extraversion (E)

Extroverts are sociable, but sociability is only one of the traits that comprise the domain of Extraversion. These people tend to prefer large groups and gatherings, and are assertive, active, and talkative. They like excitement and stimulation and tend to have a cheerful nature. They are “upbeat, energetic and optimistic” (Costa and McCrae, 1992, p. 15). A strong association exists between positive affect and extraversion (Watson and Clark, 1992) and Fontana and Abouserie (1993) found a significant negative correlation between stress and Extraversion. They explained this by saying that the typical characteristics of an extrovert may enable the extrovert teacher to respond to professional stressful situations relatively effectively. An introvert on the other hand, may be more affected by life events, and could in consequence suffer more stress from professional work.

2.8.2.3 Openness to Experience (O)

Openness to experience incorporates the traits of “an active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, intellectual curiosity, and independence of judgement” (Costa and McCrae, 1992, p.15). These elements of Openness have often played a role in theories and measures of personality, but their coherence into a single broad domain has seldom been recognised (Costa and McCrae, 1992).

Alternative formulations of the five factor model often label this factor ‘Intellect’ (Trapnell, 1994) and Openness scores are modestly associated with both education and measured intelligence. Openness is especially related to aspects of intelligence, such as divergent thinking, which contribute to creativity (McCrae, in Costa and McCrae, 1992). However, Openness is not equivalent to intelligence. “In a factor analytic sense, measures of cognitive ability form a sixth independent factor that one regards as being outside the domain of personality proper” (Costa and McCrae, 1992, p.15).

2.8.2.4 Agreeableness (A)

Like Extraversion, Agreeableness is primarily a dimension of interpersonal tendencies. “The agreeable person is fundamentally altruistic. He/she is sympathetic to others and eager to help them, and believes that others will be equally helpful in return. By contrast, the disagreeable person is egocentric, sceptical of others’ intentions, and competitive rather than co-operative” (Costa and McCrae, 1992, p. 15).

It would appear that 'agreeable' people are preferred by others and psychologically healthier than disagreeable or antagonistic individuals. However, the readiness to fight for one's own interests is often advantageous and therefore, it would seem that 'agreeableness' is not necessarily a virtue in the classroom for teachers.

2.8.2.5 *Conscientiousness (C)*

Individual differences in the active process of planning, organising, and carrying out tasks, are the basis of Conscientiousness. The Conscientious individual is "purposeful, strong-willed, and determined, and probably few people become great musicians or athletes without a reasonably high level of this trait" (Costa and McCrae, 1992, p. 16). Digman and Takemoto-Chock (in Costa and McCrae, 1992) refer to this domain as 'Will to Achieve', where, on the positive side, high Conscientiousness is associated with academic and occupational achievement; on the negative side, it may lead to annoying fastidiousness, compulsive neatness, or 'workaholic' behaviour. One could suggest that some teachers may be too conscientious, giving a lot of themselves but perceiving themselves to receive insufficient reward for their hard work. This could, in turn, impact on their stress levels.

Mischel's (in Shinn, 1982) review suggests that the personality trait of Conscientiousness is not consistently related to anything because behaviour depends not so much on individual predispositions, as it does on transactions between people and their environments.

2.9 Stress and Burnout in the Teaching Profession

2.9.1 Reasons for selecting Teachers as subjects

This study focuses on teachers because educators play an important role in the changes taking place in South Africa today, and without a thorough understanding of the sources of stress and burnout in teachers, little can be done to prevent them.

The area of teacher stress has received a great deal of attention since the beginning of this century. Schwab (1986) listed a number of reasons for the continuing interest in the phenomenon of teacher burnout. Included in this list are the facts that the teaching profession is one of the largest professions, and society continually applies pressure on teachers to correct social problems (e.g. drug, alcohol and sexual abuse), educate students in academic and skill areas, meet individual student's needs, etc.

In 1933, Hick (in Cedoline, 1982) found 28% of 600 teachers experiencing nervous conditions. In 1938, 37.5% of a sample of 5000 teachers claimed they experienced worry and nervousness, and in 1951, 43% indicated "considerable strain and tension" (Cedoline, 1982, p. 93). A 1967 study found 78% of teachers experiencing moderate to considerable levels of stress. Kyriacou and Sutcliffe (1979) found that 23.4% of a sample of 218 teachers experienced teaching as 'stressful'. This continuing rise in teacher stress experience is alarming. Hunter (in Rigby, 1989) found that teachers, air traffic controllers and surgeons have potentially the most stressful occupations in the world.

Statistical data indicates that teachers are abandoning the profession in increasing numbers (Cedoline, 1982; Burke and Greenglass, 1993). Teacher burnout is one of the factors which contributes to this trend, and is considered a more serious problem to the teaching profession than job change or early retirement because it leaves a teacher unable to cope. Deteriorating work performance, negative psychological states (depression, frustration), and physical conditions (such as headaches, psychosomatic symptoms, ulcers) occur when a teacher reaches burnout (Burke and Greenglass, 1993).

2.9.2 Teacher Stress and Burnout

The frequency and intensity of stress experiences vary from teacher to teacher (Fimian, in Rigby, 1989). Teaching requires a great deal of enthusiasm, pupil motivation, staff meetings and paperwork, dealing with bureaucracy and educational authorities. All

this may be required but with little recognition leading to feelings of powerlessness.¹ A major concern regarding teacher stress is the negative effect it has on the working relationship teachers have with their pupils, the quality of teaching and commitment level of the teachers (Cedoline, 1982).

In early studies of burnout in the teaching profession, burnout was perceived as a general concept which included almost any negative reaction of teachers to pressure related to their work such as becoming frustrated, mentally exhausted, excessively worried, feeling depressed and anxious and acting defensively with others (Friedman, 1993). In later studies, the Maslach Burnout Inventory was used to measure teacher burnout specifically (Schwab, 1986; Friedman, 1986).

* Although there is no specific definition of Teacher Burnout, it is generally agreed in the literature that the definitions applied to Burnout are used in defining Teacher Burnout (Belcastro, Gold and Hays, 1983). Teacher Burnout is also viewed as having the same dimensions (ie. Emotional Exhaustion, Depersonalisation and reduced Personal Accomplishment), signs and symptoms, and stages of burnout (Belcastro, Gold and Hays, 1983; Iwanicki, in Mills, 1986).

* As in other helping professions, Emotional Exhaustion - the initial aspect of teacher burnout - is the tired and fatigued feeling that develops as one's energies are drained. When these feelings become chronic, the teacher is unable to perform and give of him/herself to students as they once could. Depersonalisation develops when the teacher no longer has positive feelings toward his/her students, and instead, displays negative attitudes towards them (e.g. calling their students "animals"). Of particular importance for teachers is the feeling of low Personal Accomplishment from teaching. Teachers usually become teachers to help students, but when they no longer feel they are accomplishing this, they may feel that there is very little they can do about it within the teaching profession (Schwab, 1986; Pierce and Molloy, 1990; Burke and Greenglass, 1993; Byrne, 1994).

Kyriacou and Sutcliffe (1979) defined teacher stress as:

"a response of negative affect (such as anger or depression) by a teacher usually accompanied by potentially pathogenic physiological and biochemical changes (such as increased heart rate or release of adrenocorticotrophic hormones into the bloodstream) resulting from aspects of the teacher's job and mediated by the perception that the demands made upon the teacher constitute a threat to his/her

self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat" (p. 89).

The above definition is based on the interactional model of stress (discussed earlier in this chapter), and focuses on the imbalance between teacher demands and coping. It incorporates the appraisal aspect (i.e. potential stressors only become stressors if appraised as a threat). The appraisal will depend on the interaction between individual characteristics and the person's perception of the demands of teaching (Singer and Davidson, 1991). The person's personality may act to mediate the stress or appraisal (Lazarus, 1966; Moracco and McFadden, in Rigby, 1989; Boyle, et al., 1995). Considerable individual differences in susceptibility to stress exist. Introverts tend to perceive negative affect at lower stimulus intensities than extroverts, thus implicating cognitive appraisal as a mediating variable (Lazarus, in Boyle, et al., 1995).

Moracco and McFadden's Model suggests that the cognitive appraisal aspect will be influenced by whether the teacher feels capable of meeting the demands of the job (Rigby, 1989). Age, sex, locus of control and personal resources may also influence one's appraisal (Beehr, Walsh and Taber, in Rigby, 1989; Huston, 1990). This model includes a feedback loop which suggests that when a person cannot cope in a stressful situation, the situation is appraised as more threatening (i.e. teachers operating under stressful conditions are more likely to perceive events as stressful).

The emphasis of more recent models, is that maladaptation to stress is a cognitive process. Therefore, Cooley and Yovanoff (1996) suggest that by using effective coping strategies, levels of teacher stress can be altered; and furthermore, teachers can be taught how to identify effective coping strategies and how to use them. This model appears to focus on coping strategies as a recipe for prevention of burnout. However, as has been mentioned, each situation and individual is different and will respond to and cope differently with burnout.

Blase (1982) proposed the Teacher - Performance - Motivation (TP - M) theory which suggests that a dynamic and reciprocal relationship exists between the teacher and his/her students, and that this relationship is critical to the understanding of teachers' work. The theory states that teachers perceive student needs and apply effort (expenditure of mental, emotional and physical energy for valued outcomes), and coping resources (physical, psychological, social and material resources), in an attempt to satisfy these needs and lead to valued outcomes with students. According to this

theory, burnout occurs when teachers' efforts and coping resources fail to overcome job-related stressors effectively.

This model however, focuses too narrowly on the teacher-pupil relationship without taking into account relationships with educational authorities, parents and the broader community (Rigby, 1989), as the Ecological model proposes.

In the next section, the major stressors found particularly in teacher stress research studies, are described.

2.9.3 Sources of Teacher Stress and Burnout

Like many other professionals, teachers feel they should be able to handle their own stress. Unfortunately, the burnout rate does not reflect the viability of the superhuman expectations. There is very rarely one cause in a case of burnout. Instead burnout is almost always caused by a combination of factors (Willings, 1992). Although sources of burnout have already been discussed (2.8.1), the literature on the sources of occupational stress, teacher stress, and burnout cover similar areas and are often inter-linked. However, some are specifically related to the teaching profession and will be presented in 2.9.3.1. Cooper's (1983) model (Figure 4) will again be used as a basic framework to present the literature.

2.9.3.1 Potential Sources of Teacher Burnout

Factors intrinsic to the job:

- * poor physical working conditions; such as lack of teaching resources and aids (Kyriacou and Sutcliffe, 1978).
- * inadequate school buildings and reduced expenditure (Dunham, 1983; Mills, 1986).
- * extra-curricular activities (after school requirements such as marking and sport) (Kyriacou and Sutcliffe, 1978).
- * job overload/underload; high pupil/teacher ratios (Pierce and Molloy, 1990; Cooper and Kelly, 1993; Pretorius, 1994); time pressures and too much administrative work (Kyriacou and Sutcliffe, 1978).
- * physical danger; increased crime and violence in schools (Ianni and Reuss-Ianni, 1983).

Role in the Organisation:

- * Role ambiguity and role conflict (Dunham, 1983; Burke and Greenglass, 1989 and 1993; Huston, 1990; Byrne, 1994; Pretorius, 1994).
- * Role underload/overload (ie. constant interaction with pupils and staff members (Holland, in Mills, 1986)
- * Responsibility for others and pupil's needs (Blase, 1982; Cedoline, 1982).

Career Development:

- * poor promotion prospects (Kyriacou and Sutcliffe, 1978; Huston, 1990; Byrne, 1994)
- * poor status in society (Cedoline, 1982)
- * lack of job security (Austin, in Mills, 1986)

Relationships at work:

- * poor relationships with pupils (Kyriacou and Sutcliffe, 1978; Huston, 1990; Cooper and Kelly, 1993; Byrne, 1994).
- * poor relationships with community and parents (Cedoline, 1982)
- * lack of recognition for work done (Cedoline, 1982; Pierce and Molloy, 1990; Willings, 1992).

Organisational Structure and Climate:

- * lack of communication (Cedoline, 1982)
- * lack of participation in decision making (Bundy, 1981; Cedoline, 1982; Pretorius, 1994).
- * poor salaries and conditions of service (Cedoline, 1982).

School Interface with home and society:

- * work - home interface: work overload affects home life (Cedoline, 1982; Mykletun, in Rigby, 1989)
- * home - work interface: life changes affect work (Davis; Sparks; Sparks and Hammond, in Rigby, 1989).

2.9.4 Personal Factors

2.9.4.1 Personality Characteristics

Cedoline (1982) mentions that most people who choose to become teachers, are “disposed by their personalities to specific attitudes and aptitudes” (p. 104). They tend to enjoy working with children/adolescents, and have a desire to help others, despite the low salaries. “The personality characteristics of altruism, sincere caring, and idealism - when met by lack of feedback, limited appreciation, public apathy, and day-to-day stress - make teachers vulnerable candidates for occupational distress” (ibid, 1982, p. 105).

Empirical studies of psychological burnout among teachers have examined individual differences and personality characteristics associated with levels of burnout. Such relationships are found, but tend to be inconsistent and not very convincing (Burke and Greenglass, 1993 and 1995). Kyriacou and Sutcliffe (1978) found that there is very little association between teacher stress and biographical characteristics, and as such personality characteristics, rather than biographical characteristics may need to be investigated as important determinants of individual differences in teacher stress. Fontana and Abouserie (1993) found that levels of stress in teachers do appear to be related to personality characteristics. Their study found that personality characteristics do, in fact, appear to contribute more to stress levels in teachers than do the variables of age or gender. They suggest then that future studies should concentrate particularly on personality characteristics, and attempt to identify exactly how they interact with the specific tasks with which the teacher is faced. Mills (1986) suggested an investigation into the role of personality characteristics in lecturing staff to the burnout process in a study done on University lecturers. Black (1991), having completed his study, realised the importance of personality in studies on burnout and suggested future research explore the effects of personality variables on burnout.

2.9.4.2 Demographic Factors and Teacher Stress

Burke and Greenglass (1993 and 1995) found that demographic characteristics were only weakly related to psychological burnout components (as measured on the Maslach Burnout Inventory). Maslach and Jackson (1986) suggest that the correlations between burnout and demographic factors be explored within various occupations because demographic variables can be confounded with the type of work

and one's job status. Studies that have examined the relationship between teacher demographics and burnout have constantly found that certain factors do predict a small, but significant amount of variance in burnout subscales (Maslach, 1982a; Maslach and Jackson, 1986; Schwab, 1986).

2.9.4.2.1 Marital and Family Status

Cedoline (1982) notes that although work was found to be important, good marital and family relations were most important to successful living. If one's family remains the top priority, satisfaction at work will be more likely. In other words, positive family relations can buffer the effect of occupational stress.

Pierce and Molloy (1990) found no significant relationship between marital status and burnout in teachers. Furthermore, they found no significant difference in the level of burnout experienced by teachers with or without children.

2.9.4.2.2. Gender

Following on from Maslach and Jacksons (1986) suggestion that demographic variables be explored within occupations, it was found in studies of teachers (Schwab and Iwanicki, in Maslach and Jackson, 1986), managers (Cahoon and Rowney, in Maslach and Jackson, 1986), and social service employees (Maslach and Jackson, in Maslach and Jackson, 1986), that a small sex difference was found on the Depersonalisation scale, with men scoring slightly higher than women. However, this difference was not as important as other variables in predicting burnout in each occupation.

Cooper and Kelly (1993), in a study of 2638 head teachers, found that female teachers in secondary and higher education experienced significantly more job dissatisfaction than male teachers; but that male teachers seemed to suffer more mental ill health than females. Pierce and Molloy (1990) found no significant relationship between gender and burnout in teachers. Solman and Fled (in Fontana and Abouserie, 1993) also found that gender differences were very slight with regards to burnout.

2.9.4.2.3 Age

Age has been found to be a significant predictor of emotional exhaustion (Schwab, 1986). Younger teachers scored higher on the Emotional Exhaustion subscale than

older teachers. In studies that have found this trend, teachers were grouped in ages of 20 - 29; 30 - 39; 40 - 49; etc. (Schwab, 1986). Pierce and Molloy (1990) found no significant relationship between age and burnout in teachers.

2.9.5 Organisational Factors

Multiple regression techniques have been employed in surveys using the Maslach Burnout Inventory (MBI) to identify organisational factors that contribute to teacher burnout, and have been able to predict a significant amount of variance in each scale of the MBI. The amount of variance explained has been the highest in the Emotional Exhaustion scale, with a lower percent of variance explained for the Depersonalisation and Personal Accomplishment scales (Schwab, 1986). In terms of burnout research in educational settings, the organisational factors that have been found to be related to burnout are those perceived by teachers (ibid, 1986). In other words, teacher perceptions are used to determine organisational factors that relate to burnout which may not be consistent. What Schwab (1986) suggests, is that studies should re-examine previously identified organisational predictors of burnout to determine if they are significant when using the school as a unit of analysis.

Although this has been suggested, the present study's main focus concerned personality and demographic factors with only two organisational factors being considered (i.e. Type of school taught at and the average number of pupils taught per class):

2.9.5.1 Average number of Pupils taught per class

The subject of class size has been one of the most long-standing and controversial issues in education (Cedoline, 1982). Maslach and Pines (in Cedoline, 1982) found that the quality of professional interaction is greatly affected by the number of people for whom the worker is providing care. They found that as the numbers increased, cognitive, sensory and emotional overload resulted. School boards and administrators have attempted to show that class size is not a significant factor in school achievement. Teachers, on the other hand, have claimed that large classes of heterogeneous students are less manageable (Cedoline, 1982). Pierce and Molloy (1990) found that overcrowded classrooms were reported as being a significant source of stress in the teaching environment. French (1993) reported that as class size increased, achievement decreased. They found that none of the teachers in schools with pupil-teacher ratios below 15:1 reported high levels of stress associated with class size.

Pretorius (1994) in a study of educators at a South African University, found the number of students taught to be a significant predictor of Emotional Exhaustion and Depersonalisation (as measured by the Maslach Burnout Inventory).

2.9.5.2 Type of School

In a study of 750 teachers from 16 government and non-government schools in Australia, Pierce and Molloy (1990) found that the school type did make a difference to the level of Burnout experienced by teachers. They found that the proportion of teachers in the high burnout group from government schools was higher than in the low burnout group; while the proportion of teachers in the high burnout group from non-government schools was less than in the low burnout group.

2.10 Conclusion

The successive rapid changes with which teachers are having to come to terms, may alter the picture of teacher stress and burnout revealed in the current literature. In urging this point, the writer questions whether the studies reviewed may reflect the current state of affairs in South Africa. Nevertheless, the studies reviewed suggest that it will be informative and necessary to consider the relationship between demographic factors and burnout. Furthermore, considering burnout in the context of the five factor model of personality may show interesting results and ultimately assist in developing effective coping mechanisms.

CHAPTER 3

METHODOLOGY

3.1 Aim of the Study

Using a sample of teachers, the aim of this study is to determine whether personality factors correlate to the three dimensions of burnout measured by the Maslach Burnout Inventory, and secondly to investigate the possible relationship that age, gender, marital status, number of children, average number of pupils taught per class and the type of school taught at, have on the three dimensions of burnout in teachers.

3.2 Selection of Topic

As so many changes have (and are) taking place in South African schools, the demands on the teacher have increased considerably and may result in teachers leaving the profession. Also, with the influx of pupils from educationally disadvantaged backgrounds, and increasing numbers in the classroom, teachers will find it more and more difficult to tend to the needs of pupils. In other words, teachers from previously educationally advantaged schools have a difficult job in adapting to the changes, while still maintaining high standards of teaching. It appears that for years people have been concerned with the emotional well-being of pupils in the classroom only and have ignored the needs, motivation and morale of teachers. Research in the area of teacher burnout has concentrated on the main organisational stressors that have led to burnout such as Role Ambiguity and Role Conflict. Studies have also examined the relationship between teacher demographics of previously educationally advantaged schools and burnout, but have ignored personality factors that need to be addressed when discussing burnout in teachers (Maslach, 1982a; Rigby, 1989; Black, 1991 and Costa and McCrae, 1992). It is hoped that if a correlation is found between personality factors and elements of burnout, that it will aid in developing more effective coping strategies to suit the personality types. For example, an Introvert may benefit from assertiveness training to help cope with the demands of teaching. Furthermore, by looking at the level of burnout in government and private school teachers, one may see the need for some schools to introduce programmes to enable the teachers to recognise and manage burnout in order to be more effective, rather than lose the teacher altogether.

3.3 Selection of Method

Data collection for this study was obtained exclusively by self-report questionnaires. These included the Neo-Five Factor Inventory, Maslach Burnout Inventory (which have not been included in the Appendix due to copyright), and a Demographic data sheet (see Appendix 1). The popularity and advantages of using self-report questionnaires is that they are relatively inexpensive, easy to administer and score. Furthermore, anonymity is maintained. However, the disadvantages of self-report questionnaires cannot be overlooked. These include the fact that respondents may be influenced by what they feel is socially desirable. Although this may be true for most self-report questionnaires, the Maslach Burnout Inventory appears relatively unaffected by it (see 3.6.2.3). A further disadvantage of self-report questionnaires is their lack of objectivity. This will be discussed further in 6.1. Despite these disadvantages, and due to the size of the sample, and time constraints, self-report questionnaires were chosen as the method of data collection in this study.

3.4 Respondents

The respondents for this study were drawn from eight high schools (4 Private and 4 Government) in the Pietermaritzburg area.⁶ A total of 278 full-time teachers were approached (190 teaching at Government schools; 88 teaching at Private schools). 141 questionnaires were completed and returned (90 from Government schools; 51 from Private schools), giving an overall return rate of 51% (47% from Government schools; 58% from Private schools).

3.5 Procedure

The principal of each school was contacted to ask permission to approach the teachers, and dates and times were set for a meeting with the teachers. The majority of the research was carried out in the month of June, with one school's data being collected in July. It was hoped that the questionnaire could be filled out during a staff meeting and returned to the researcher the same day. However, due to time constraints and heavy pressures on the teachers, this was possible for three of the schools only. The teachers were briefed as to how to complete the questionnaires and advised that participation was entirely voluntary and confidential and that the results would be used for research purposes only. No time limit was imposed and on completion of the

questionnaire, the teachers were thanked for their participation and asked to place their questionnaires in a box provided. Any questions asked during the completion of the questionnaire were answered by the researcher.

Owing to the other 5 schools not being able to set aside time for a group meeting, the principals were asked to distribute the questionnaires. The principals were briefed thoroughly by the researcher and left with written instructions to refer to. The principals then briefed the teachers. The teachers were then given time to complete the questionnaire at their convenience and asked to return it to the principal. The researcher recognises that this is not ideal, as it reduces the return rate of the questionnaires, however, as the questionnaires required self-reporting, and can be individually administered, the data is still regarded as valid.

3.6 Instruments

3.6.1. Neo-Five Factor Inventory

The Five Factor model has become the focus of personality research world-wide (Trapnell, 1994). The five factors represent the most basic dimensions underlying the traits identified in both natural languages and psychological questionnaires. The Revised Neo-Personality Inventory (Neo-PI-R) is a measure of normal personality traits that has demonstrated its utility in both clinical and research settings. (Costa and McCrae, 1992). It is a concise measure of the five major domains of personality according to Costa and McCrae (1992) and Goldberg (1993) (Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness) and some of the more important traits that define each domain. The Neo-PI-R is an advancement of the Neo-PI which had scales that measured the traits of Neuroticism (N), Extroversion (E), and Openness (O), but did not have adequate scales to measure Agreeableness (A) and Conscientiousness (C). The Neo-PI-R added the Agreeableness and Conscientiousness trait scales, thus completing the Neo-PI. The Neo-Five Factor Inventory (Neo-FFI) is a 60 item version of the Neo-PI-R that is scored for the 5 domains only (ie. Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness). The Neo-FFI is useful when time available for testing is limited and only global information on personality is needed (Briggs, 1992). For these reasons, the Neo-FFI was used in this study.

3.6.1.1 Scoring

For each statement, the respondent is asked to Strongly Agree (SA); Agree (A); be Neutral (N); Disagree (D); or Strongly Disagree (SD). Each response is coded from 0 - 4. The marked responses to the 12 items of Neuroticism are summed to obtain a score for 'N'. The number is the raw score for the 'N' domain. The same procedure was used to calculate the remaining domain raw scores.

3.6.1.2 Validity

As said before, the Neo-FFI was developed as a short form of the Neo-PI. Although new norms have been provided, the instrument itself is unchanged (Costa and McCrae, 1992). Item selection for the Neo-FFI used the validimax factors (McCrae & Costa, 1989) from the Neo-PI as the criteria. When correlated with the Neo-PI validimax factors, the Neo-FFI scales showed correlations ranging from .75 for Conscientiousness to .89 for Neuroticism. When the Neo-FFI was correlated with the domain scales of the Neo-PI-R in the 1989 study done by McCrae and Costa, correlations were .92, .90, .91, .77, and .87 for Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness domains respectively (Costa and McCrae, 1992). However, it must be noted that the Neo-FFI scales are not equivalent to the full scales of the Neo-PI-R. As is true in most cases where abbreviated scales are formed, some precision is compromised for speed and convenience.

Concurrent validity is reported with the Eysenck Personality Inventory, the Guilford-Zimmerman Temperament Survey, and the Holland Self-Directed Search (Dolliver, 1987).

3.6.1.3 Reliability

The implicit theory behind the construction of most scales, including those of the Neo-PI-R, is that individual items tap some small aspect of the trait the scale is designed to assess (Costa & McCrae, 1992). By summing each item, a broader and more reliable measure is obtained. Retest reliability was measured by Costa & McCrae (1992) where coefficients were found to be .79, .79, .80, .75 and .83 for Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness, respectively. The coefficients were above .65 indicating good reliability for an instrument that measures a variety of characteristics (Owen & Taljaard, 1989).

3.6.2 Maslach Burnout Inventory

The generally consistent pattern of findings that emerged from research done in the area of Burnout, led Maslach and Jackson to devise an instrument to assess what they claimed as a specific syndrome of burnout. Research indicates that the inventory provides a psychometrically sound tool for measuring burnout and particularly for measuring occupational stress (Belcastro, Gold and Hays, 1983). The Maslach Burnout Inventory (MBI), contains three subscales that assess the different aspects of experienced burnout: emotional exhaustion, depersonalisation, and lack of personal accomplishment. Each aspect is measured by a separate subscale. The emotional exhaustion subscale assesses feelings of being emotionally overextended and exhausted by one's work. The depersonalisation subscale measures an unfeeling and impersonal response towards recipients of one's service, care and instruction. The personal accomplishment subscale assesses feelings of competence and successful achievement in one's work with people.

The original inventory assessed two dimensions for each of the three scales. One for frequency, and one for intensity. It has been found, however, that the high intercorrelations between the ratings of the intensity and frequency make the two dimensional format of the questionnaire unnecessary (Maslach and Jackson, 1981a; Pretorius, 1994). This was found to be particularly true for teachers (Maslach and Jackson, 1981a).

3.6.2.1 Scoring

The frequency that the respondent experiences feelings related to each subscale is assessed using a seven point response format. (ie. 0 = Never; 1 = A few times a year; 2 = Once a month or less; 3 = A few times a month; 4 = Once a week; 5 = A few times a week; 6 = Everyday)

Scoring is done by using a scoring key which indicates which responses must be added to obtain a score for each subscale. Numerical cut-off points are presented by Maslach and Jackson (1981b) for subjects in teaching, post-secondary education, social services, medicine, mental health, and others. The following table categorises the MBI scores according to low, average or high (used only for teachers):

	LOW	AVERAGE	HIGH
EE	≤16	17 - 26	≥27
DP	≤8	9 - 13	≥14
PA	≥37	36 - 31	≤30

Table 1
Categorisation of MBI Scores
(Maslach and Jackson, 1981b, p.3)

For statistical analysis, the original numerical scores were used rather than the categorisations of low, average, and high.

Burnout is not conceptualised by Maslach and Jackson (1981b) as a dichotomous variable, rather it is seen to be a continuous variable ranging from low to moderate to high degrees of burnout. As measured by the Maslach Burnout Inventory, a high degree of burnout is reflected in high scores on the Emotional Exhaustion and Depersonalisation subscales and low scores in the Personal Accomplishment subscale. The seven points on the frequency dimension are all explicitly anchored for the respondent, creating a more standardized response scale. Therefore, the researcher can be certain about the meanings assumed by respondents for each scale value.

3.6.2.2 Reliability

Maslach and Jackson (1981b) have shown the MBI to be a reliable measure of Burnout. Reliability coefficients for the test were based on subjects who were not involved in the item selection procedures. The various subscales were found to have the following reliability coefficients: Emotional Exhaustion = .90; Depersonalisation = .79; and Personal Accomplishment = .71 (Maslach & Jackson, 1981b), and found to be acceptable coefficients (ie. above .65).

3.6.2.3 Validity

Convergent validity (ability to differentiate between two groups expected to differ on the construct) was demonstrated by correlating a person's MBI scores with behavioural ratings made independently by a person who knew the respondent well. Also, MBI scores were correlated with the presence of certain job characteristics that were expected to contribute to experienced burn out. (eg. the number of clients/pupils one must deal with). MBI scores were also correlated with measures of various outcomes that have been hypothesised to be related to burnout (eg. the desire to leave one's job). According to Maslach & Jackson (1981b) all the above correlations

provided adequate evidence that the MBI is valid. They did not, however, give data to verify this.

Discriminant validity was obtained by “distinguishing it from measures of other psychological constructs which might be presumed to be confounded with burnout” (Maslach and Jackson, 1981b, p. 10). Low correlations between these burnout subscales and other measures of job satisfaction were found when reviewing studies conducted with lawyers, rehabilitation workers and mental health workers (Arthur, 1990).

In terms of the possible confounding effect of social desirability, it was found that none of the MBI subscales correlated significantly with the Crowne-Marlowe Social Desirability Scale at the 0.05 level (Belcastro, et al, 1983; Arthur, 1990).

3.7 Demographic Questions

Demographic details were asked on the questionnaire (Appendix 1) where subjects supplied data concerning their age, gender, marital status, number of children, average number of pupils taught and the type of school taught at.

3.8 Data Analysis

With regard to the three dimensions of burnout and the five personality domains, means and standard deviations were calculated to enable a comparison to be made between the present study's data and that of Maslach and Jackson's (1986) and Costa and McCrae (1992) studies, respectively.

The demographic information (age, gender, marital status, number of children, average number of children taught, and the type of school taught at) was individually analysed in relation to the three dimensions of burnout (Emotional Exhaustion, Depersonalisation, and Personal Accomplishment) as measured on the Maslach Burnout Inventory. The five personality domains (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness) measured on the Neo-FFI were analysed in relation to the three dimensions of burnout. A simple correlation matrix was used for the above analyses. A Stepwise Multiple Regression procedure was used in order to develop a further understanding of the possible relationship of the demographic factors (age, gender, marital status, number of children, average number of pupils taught, and the type of school taught at), and the five personality domains (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness) to the three dimensions of burnout as measured by the Maslach Burnout Inventory. Weiss (in

Friesen and Sarros, 1989) mentions that the incremental procedure of multiple regression works from the 'bottom up'. In this procedure, variables are added which have the highest relationship with the criterion variable, as indicated by their partial correlations with the criterion.

As data collection at one government school could not be done at the same time as the other schools (see 3.5), the data from this was initially analysed separately to eliminate the possibility of the time of administration acting as a confounding variable (i.e. the bulk of the data was collected during the mid-year exams, which may have been a more stressful time of year for the teachers than after the July holidays, when the data for the one government school was collected. This may have impacted on the responses to the questionnaires, especially to that of the Maslach Burnout Inventory, where the majority of the teachers may have reported experiencing a great deal of stress during their students' exams as opposed to their colleagues who would have completed the questionnaire, having just had a holiday). Mann-Whitney - Wilcoxon Rank Sum Test was used to analyse whether the results of the one government school compared with the results of the rest of the sample. However, as there was no significant difference ($p > 0.05$) in these results as compared with the other schools, it was decided to combine the data in the final analysis.

CHAPTER 4

RESULTS

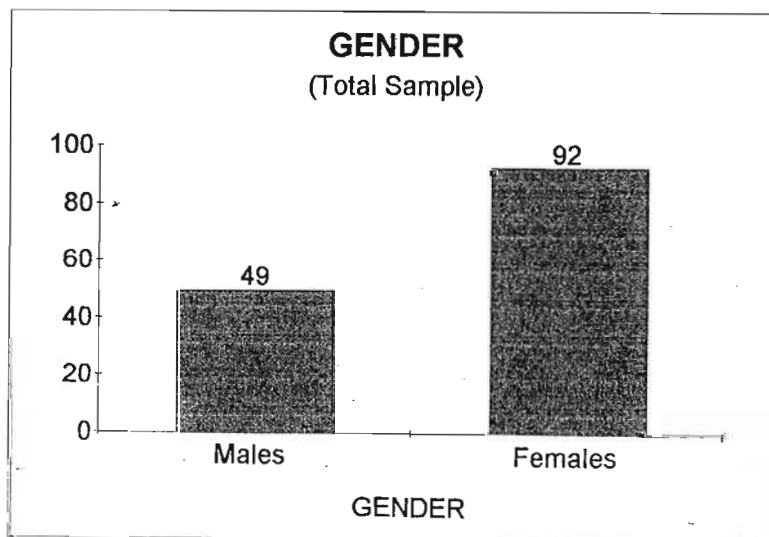
4.1 Introduction

This chapter gives a descriptive analysis of responses to all questionnaires. The data will be analysed with regards to the aims mentioned in chapter three, and discussed further in chapter five.

4.2 Personal Demographic Factors

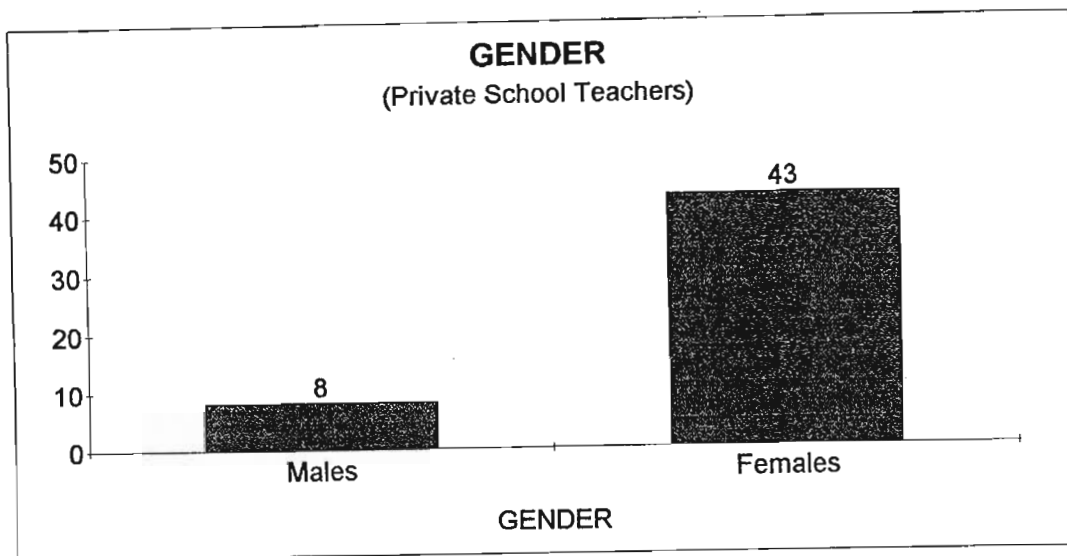
4.2.1 Gender

The sample was characterised by an unequal proportion of 92 (65%) females and 49 (35%) males (Figure 5). In the private schools, 8 (16%) of the teachers were male, and 43 (84%) were female (Figure 6). In the government schools, 41 (46%) were male, and 49 (54%) were female (Figure 7).



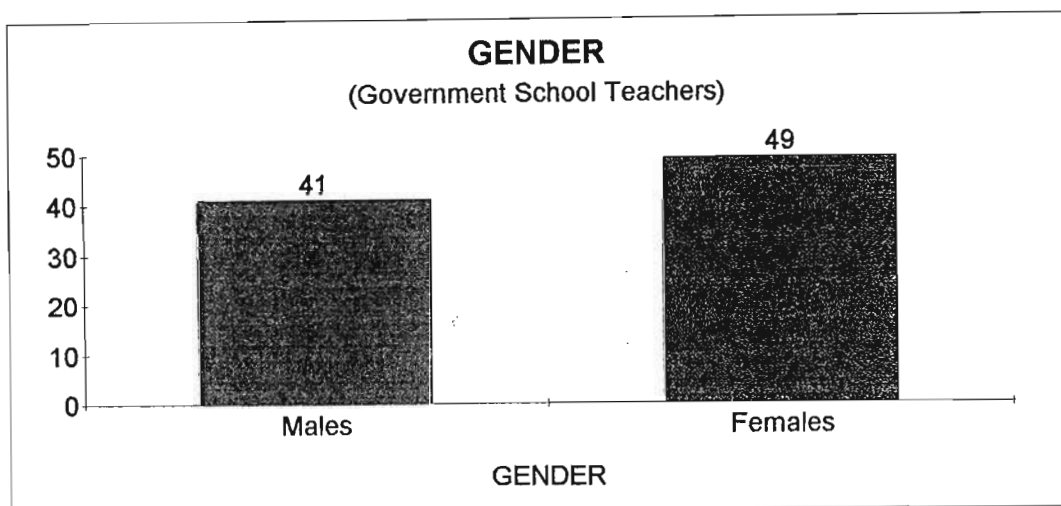
Gender of Total Sample

Figure 5



Gender of Private School Teachers

Figure 6

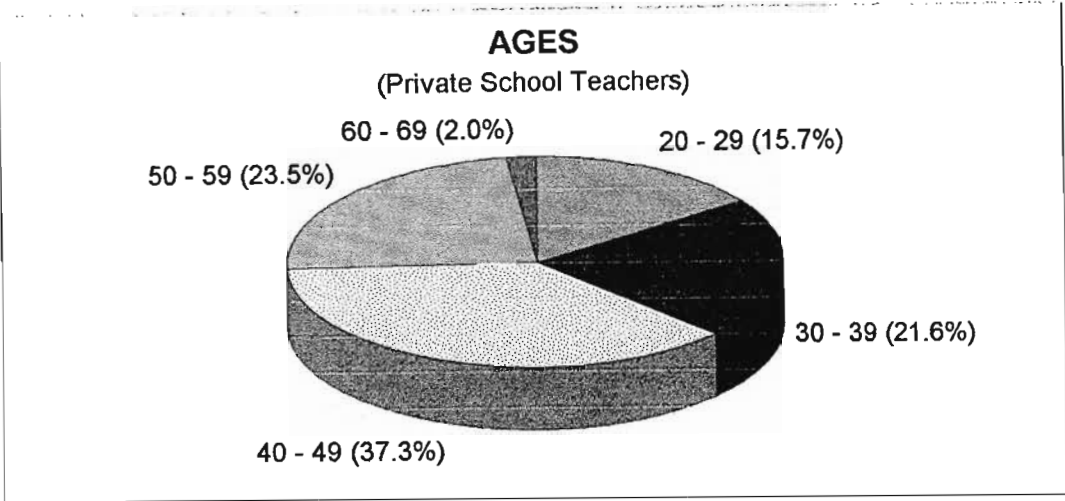


Gender of Government School Teachers

Figure 7

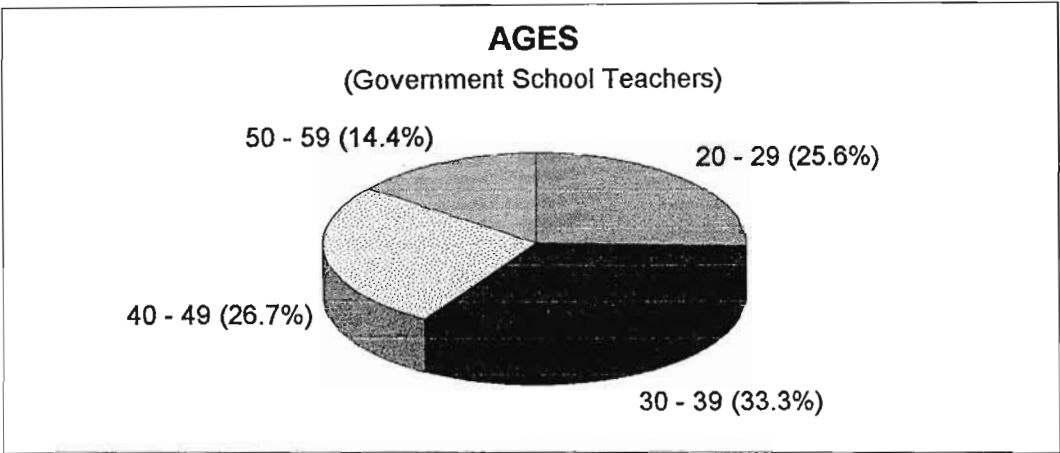
4.2.2 Ages

An age range of 20 - 61 years existed in the sample of teachers used in this study. Of the total sample, 22% were between 20 and 29; 29.1% between 30 and 39; 30.5% between 40 and 49; 17.7% between 50 and 59; and 0.7% between 60 and 61. The average age was 39 years. The following includes a graphical representation of the ages of the teachers in private schools (Figure 8), government schools (Figure 9) and the total sample combined (Figure 10).



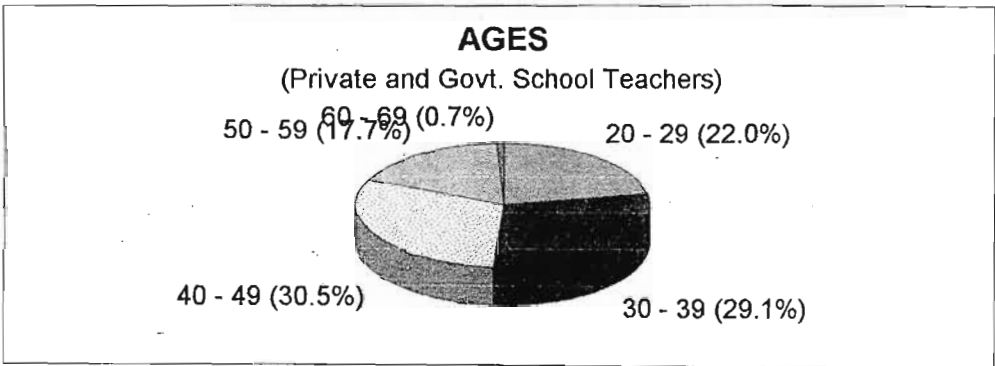
Ages of Private School Teachers

Figure 8



Ages of Government School Teachers

Figure 9

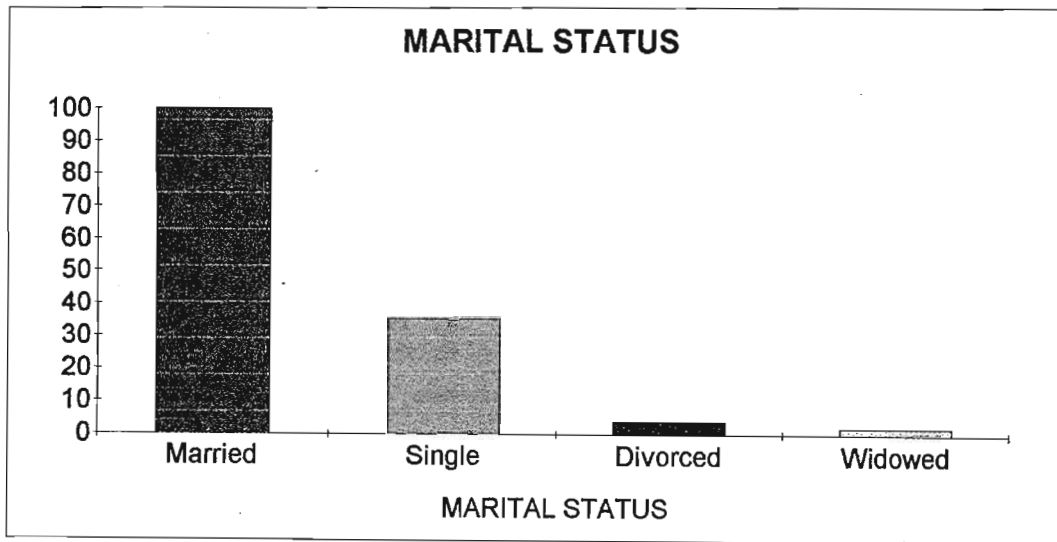


Ages of Total Sample

Figure 10

4.2.3 Marital Status

Of the total sample, 100 (71%) were married; 35 (25%) were single; 4 (3%) were divorced; and 2 (1%) were widowed (see Figure 11). As so few of the sample were divorced or widowed, it would not have been statistically relevant to analyse them separately, and therefore, their responses were combined with the single teachers' responses.

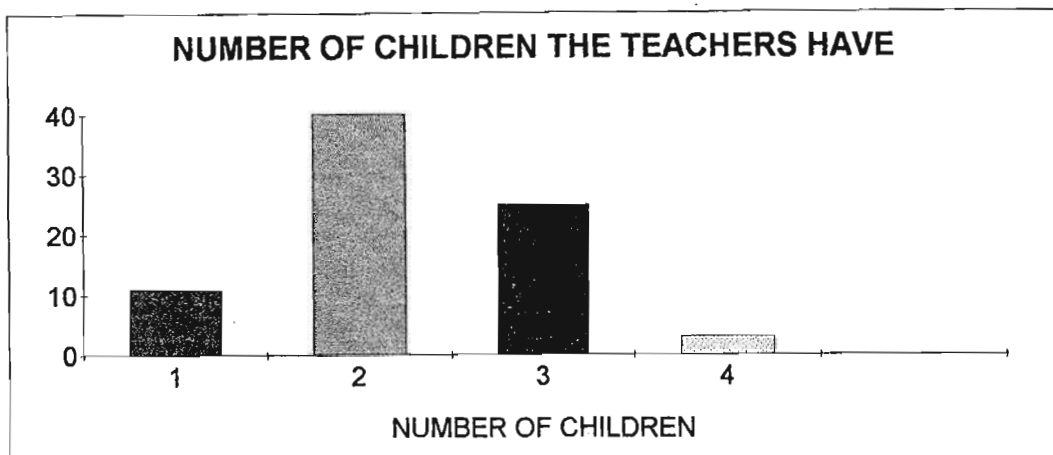


Marital Status of Total Sample

Figure 11

4.2.4 Number of Children the Teachers Have

Of the total sample of teachers, 79 have children. 11 (13.9%) have 1 child; 40 (50.6%) have 2 children; 25 (31.6%) have 3 children; and 3 (3.8%) have 4 children (Figure 12).



Number of Children of the Total Sample

Figure 12

4.3 Results of Analysis of Personal Demographic Data

An analysis of the Maslach Burnout Inventory scores of the entire sample (n = 141) provides some indication of the relationship of certain demographic variables to the experience of burnout.

The following data explores whether there was a relationship between personal demographic factors of age, gender, marital status and number of children, to the three dimensions of Burnout.

4.3.1 Gender

No significant relationship existed between the gender of the teacher and the dimensions of Burnout.

	Emotional Exhaust.	Depersonalisation	Personal Accompl.
Gender	-0.1064	0.161	0.1038

* p < 0.01 ** p < 0.001

Relationship of Gender and Dimensions of Burnout

Table 2

4.3.2 Age:

A significant negative correlation was found between the variable age and Emotional Exhaustion, where the younger the teacher, the more emotional exhaustion is

experienced. A similar relationship existed with the variable Depersonalisation, where the younger the teacher, the more depersonalised they felt ($p < 0.001$). No significant relationship existed between the age of the teacher and the amount of Personal Accomplishment experienced.

	Emotional Exhaust.	Depersonalisation	Personal Accompl.
Age	-0.2333*	-0.2564*	0.0726

* $p < 0.01$ ** $p < 0.001$

Relationship of Age and Dimensions of Burnout

Table 3

4.3.3 Marital Status

A significant ($p < 0.01$) relationship existed between marital status and feelings of being depersonalised, where married subjects experienced less depersonalisation than unmarried subjects. No significant relationship was found between marital status and the degree of emotional exhaustion, or the amount of personal accomplishment experienced.

	Emotional Exhaust	Depersonalisation	Personal Accompl.
Marital Status	-0.1394	-0.1993*	0.0649

* $p < 0.01$ ** $p < 0.001$

Relationship of Marital Status and Dimensions of Burnout

Table 4

4.3.4 Number of Children the Teachers have

A significant relationship existed between the number of children a teacher had and the amount of depersonalisation experienced (i.e. the fewer children a teacher had, the more depersonalised the respondent felt). However, with regards to Personal Accomplishment, the more children the respondents had, the more personal accomplishment was experienced ($p < 0.001$). A negative correlation existed between the number of children the teachers had of their own, and the feeling of being emotionally exhausted, where the less children one had the more emotionally exhausted one felt. However, this was not found to be significant.

	Emotional Exhaust	Depersonalisation	Personal Accompl
No. of Children	-0.1841	-0.2230*	0.2620**

* $p < 0.01$ ** $p < 0.001$

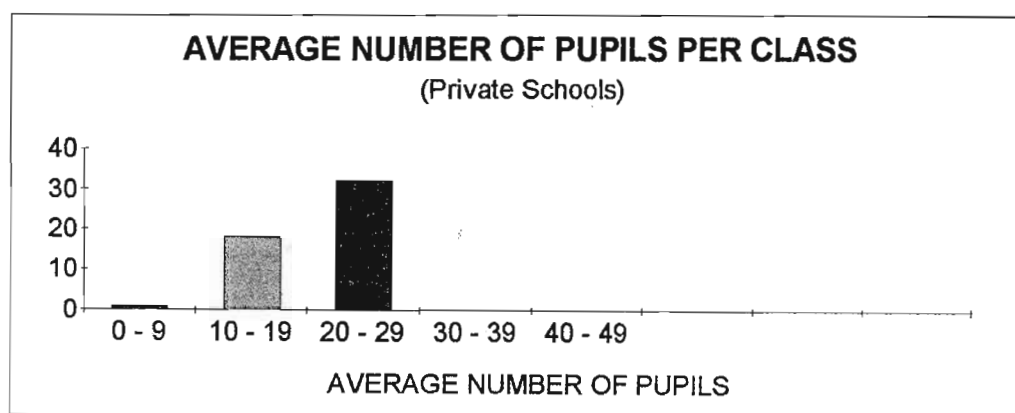
Relationship Between Number of Children and Dimensions of Burnout

Table 5

4.4 Organisational Factors

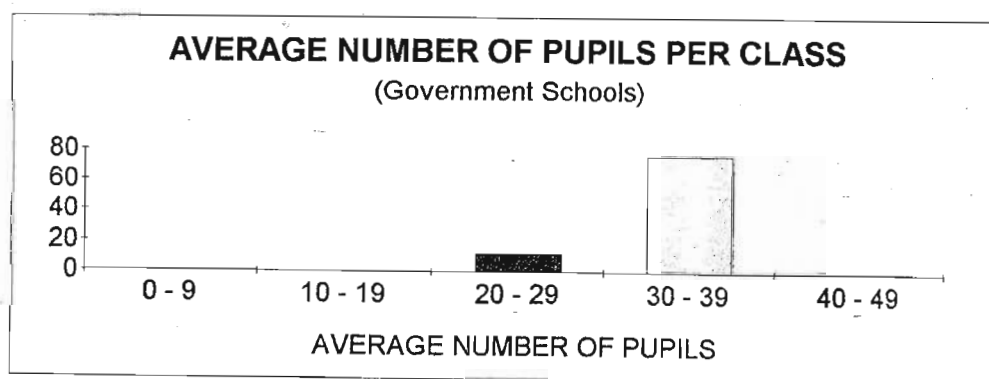
4.4.1 Average Number of Pupils per Class:

Of the total sample, 1% of teachers had an average of 0 - 9 pupils per class; 13% had an average of 10 - 19; 31% between 20 - 29; 55% between 30 - 39; and 1% between 40 - 49. The following includes a graphical representation of the average number of pupils per class in private (Figure 13) and government (Figure 14) schools, as well as the sample combined (Figure 15).



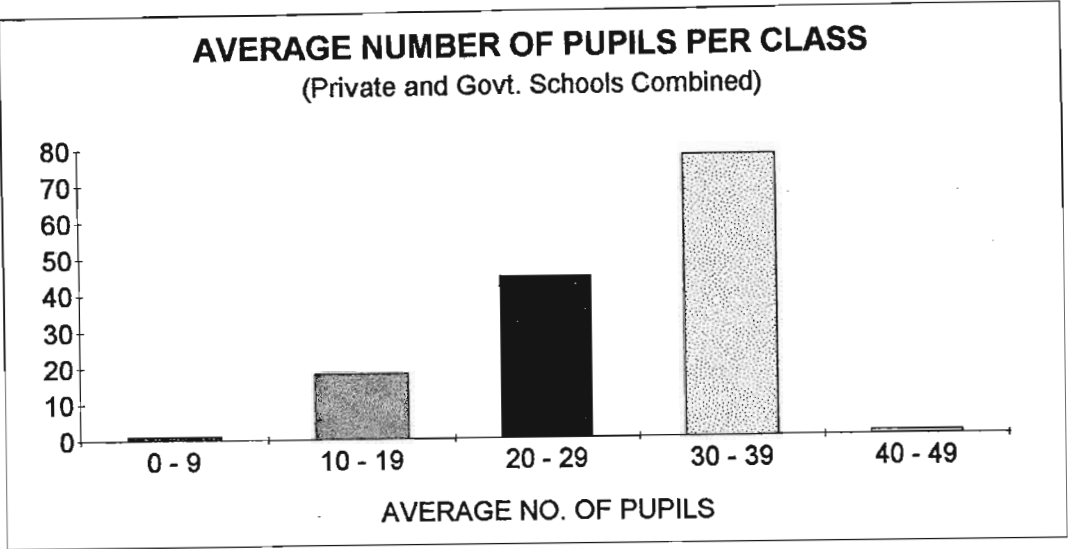
Average Number of Pupils per Class in Private Schools

Figure 13



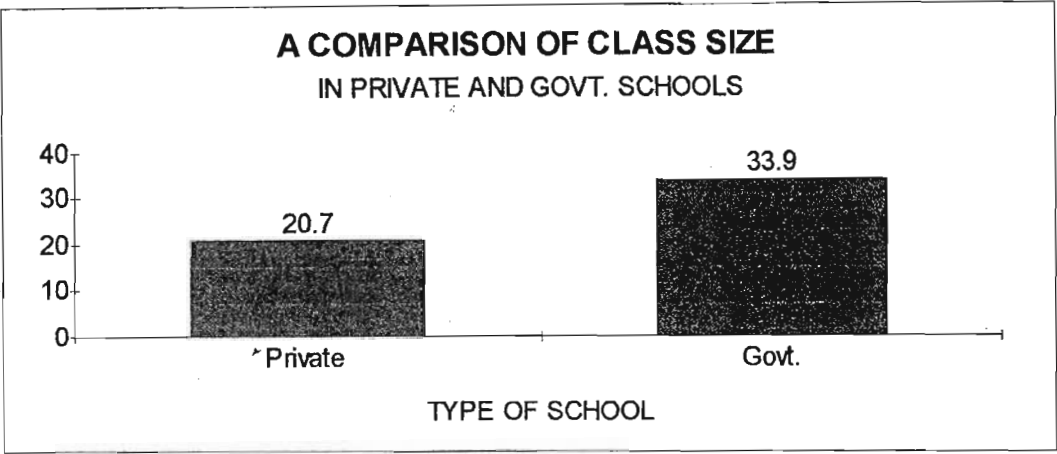
Average Number of Pupils per Class in Government Schools

Figure 14



Average Number of Pupils per Class in Both Schools Combined
 Figure 15

Comparing the class sizes in private and government schools, the average number of pupils per class was 20.7; and 33.9, respectively (Figure 16).



Comparison of Class Size in Private and Government Schools
 Figure 16

4.5 Results of Analysis of Organisational Factors

The following results illustrate the relationship between the organisational factors of the average number of pupils taught, and the type of school taught at (i.e. government or private school).

4.5.1 *The Number of Pupils Taught*

A highly significant ($p < 0.001$) correlation existed between the type of school taught at and the average number of pupils per class (-.8529) (i.e. government schools have more pupils, on average, per class, than private schools; as indicated in Figure five).

A positive correlation existed between the number of pupils taught and the amount of emotional exhaustion experienced ($p < 0.001$) (i.e. the more pupils per class the respondents taught, the more emotionally exhausted they felt). Similar results occurred with regard to Depersonalisation where the more pupils the respondents taught per class, the more depersonalised they felt ($p < 0.001$). No significant relationship was found with regards to the amount of PA experienced and the size of the average class taught.

	Emotional Exhaust.	Depersonalisation	Personal Accompl
Average No. of Pupils	0.3097**	0.3939**	-0.1734

* $p < 0.01$ ** $p < 0.001$

Relationship between Average Number of Pupils and Dimensions of Burnout

Table 6

4.5.2 *Type of School*

A highly significant ($p < 0.001$) correlation exists with the type of school taught at and the amount of Emotional Exhaustion experienced (i.e. government school teachers experienced more emotional exhaustion than private school teachers).

A highly significant ($p < 0.001$) correlation was found between the type of school and the amount of depersonalisation experienced (i.e. government school teachers experienced more Depersonalisation than private school teachers). Teachers at private schools were found to experience more Personal Accomplishment than those at government schools ($p < 0.01$).

	Emotional Exhaust	Depersonalisation	Personal Accompl
Type of School	-0.3555**	-0.4241**	0.2101*

* $p < 0.01$ ** $p < 0.001$

Relationship between Type of School and Dimensions of Burnout

Table 7

4.6 Personality Domains

The following results illustrate the relationship of the personality domains of Neuroticism, Extroversion, Openness to Experience, Conscientiousness and Agreeableness to the elements of burnout (i.e. Emotional Exhaustion, Depersonalisation and Personal Accomplishment).

4.6.1 Neuroticism (N)

A highly significant positive ($p < 0.001$) relationship existed between the amount of Emotional Exhaustion experienced and the level of Neuroticism, where the higher the level of Neuroticism, the more emotional exhaustion was experienced. No significant relationship was found with the degree of Neuroticism and the amount of Depersonalisation experienced. However, a highly significant relationship ($p < 0.001$) was found between the level of Neuroticism and amount of Personal Accomplishment experienced, where the lower the level of Neuroticism, the more Personal Accomplishment was experienced.

4.6.2 Extraversion (E)

Negative correlations were found between the amount of Emotional Exhaustion and Depersonalisation experienced and the degree of extraversion indicated, however, these were not significant. A significant positive ($p < 0.001$) relationship was, however, found between the domain of extraversion and the amount of Personal Accomplishment experienced (ie. the more extroverted one was, the more personal accomplishment was experienced).

4.6.3 Openness (O)

No significant relationship was found between this domain and the three elements of the Burnout inventory.

4.6.4 Agreeableness (A)

No significant relationship was found between this domain and the three elements of the Burnout inventory.

4.6.5 *Conscientiousness (C)*

No significant relationship was found between this domain and the three elements of the Burnout inventory.

From the results concerning personality factors, it appeared that the domains of Neuroticism and Extraversion show a significant relationship to the elements of burnout. Neuroticism appeared to have the closest relationship to Burnout where a high score on Neuroticism correlates to high scores on the Emotional Exhaustion and Depersonalisation dimensions and low scores on Personal Accomplishment (see 3.6.1).

Personality domains	EE	DP	PA
Neuroticism	.4302**	-0.1317	-.3090**
Extraversion	-0.1704	0.064	.3902**
Openness	0.0968	-0.0643	0.1097
Conscientiousness	-0.0773	-0.1362	..0458
Agreeableness	-0.1664	-0.1448	0.1797

*p< 0.01

**p< 0.001

Table 8
Correlation Matrix: Personality Domains

4.7 *Norm Study:*

Means and standard deviations related to the three dimensions of burnout in this study were compared to the sample in Maslach and Jackson's (1986) study, to investigate the extent to which the teachers in this study were "burnt out".

The Means and standard deviations of the present study are presented in Table 9 below.

Teachers	Emotional Exhaust	Depersonalisation	Personal Accompl
Mean	27.46	8.31	33.48
SD	10.77	6.6	7.01

Means and Standard Deviations of Dimensions of Burnout

Table 9

By comparison, the teacher norms reported (as a single professional group) by Maslach and Jackson (1986) demonstrate a slightly lower level of emotional

exhaustion (M = 21.25), and a higher level of depersonalisation, (M = 11.00). No difference was found between samples on personal accomplishment (M = 33.54). Comparing this study's data to that of Costa and McCrae (1992), subjects in the present study reported a higher level of Neuroticism than Costa and McCraes' (1992) subjects, however, the difference was very slight (M = 19.07). No great difference was found in the mean scores on Extraversion (M = 27.69); Openness to Experience (M = 27.03); Agreeableness (M = 32.84); and Conscientiousness (M = 34.57). Means and Standard Deviations are presented in Table 10.

	Mean	SD
Neuroticism	21.99	7.9
Extraversion	27.8	6.75
Openness	28.26	6.86
Agreeableness	33.07	6.02
Conscientiousness	35.09	7.13

Means and Standard Deviations of Personality Domains
 Table 10

4.8 Predictors of the Three Dimensions of Burnout by Multiple Regression

Results of the regression analysis for teachers in this study are presented in Table 11.

STEPWISE MULTIPLE REGRESSION ANALYSIS OF DEMOGRAPHIC
 FACTORS AND PERSONALITY DOMAINS ON DIMENSIONS OF BURNOUT

Dep. Variable	Step No.	Indep. Variable	MR	R
Emotional Ex	1	Neuroticism	0.43019	31.57
	2	Type of School	0.53163	27.18
Depersonalisation	1	Type of School	0.42407	30.48
	2	Age	0.4589	18.41
Personal Accomp	1	Extraversion	0.39019	24.9
	2	No. of Children	0.46314	18.84
	3	Neuroticism	0.48806	14.28

Table 11

4.8.1 Emotional Exhaustion (EE)

The findings of this study revealed that Neuroticism was the best predictor of Emotional Exhaustion at 0.4302.

The second best predictor included the type of school at which the subjects taught (i.e. government school teachers were found to experience more EE than private school teachers).

4.8.2 Depersonalisation (DP)

The type of school taught at was found to be the best predictor of depersonalisation (at -0.424); with age being the second best predictor.

4.8.3 Personal Accomplishment (PA)

Extraversion was found to be the best predictor at 0.3902 with the number of children the teacher has of his/her own, as the second best predictor. A third predictor was included, Neuroticism, where a low score on Neuroticism may predict a high degree of Personal Accomplishment.

4.9 Summary

In summary, of the five factors of personality measured by the Neo-FFI, Neuroticism was found to relate significantly to emotional exhaustion and personal accomplishment, as measured by the Maslach Burnout Inventory, where the higher the level of Neuroticism, the more emotionally exhausted one feels and the less personal accomplishment is felt. The results also showed that the more extroverted one is, the more personal accomplishment is experienced. No significant relationships were found between Openness to Experience, Agreeableness and Conscientiousness and the three burnout dimensions.

Of the personal demographic factors, the results indicated that married subjects experienced less depersonalisation than single subjects; and that no significant relationship was found between one's marital status and emotional exhaustion and personal accomplishment. In terms of age, it was found that younger teachers experienced more emotional exhaustion and depersonalisation than their older colleagues. No significant relationship was found between age and personal accomplishment. It appeared in this study, that gender had no significant relationship with the amount of emotional exhaustion, depersonalisation, and personal accomplishment experienced. With regards to the number of children the teacher has of his/her own, it was found that the more children the teacher has, the less depersonalised he/she felt; and the more personal accomplishment was experienced.

No significant relationship was found with the experience of emotional exhaustion. In terms of the situational factors, the results revealed that the higher the number of children one teaches per class, the more emotional exhaustion and depersonalisation is experienced, however, no significant relationship was found with the amount of personal accomplishment felt. The type of school taught at proved to relate significantly with all three dimensions of burnout as measured on the Maslach Burnout Inventory. According to the results, government school teachers suffer more from emotional exhaustion and depersonalisation, and experience less personal accomplishment than private school teachers. This could be related to the size of the classes taught in each school.

These results will be discussed fully in the following chapter.

CHAPTER 5

DISCUSSION

5.1 Introduction

The present study explored the relationship between the five personality domains (measured by the Neo-Five Factor Inventory) and the three dimensions of burnout, as measured by the Maslach Burnout Inventory. The relationship between personal demographic variables of age, gender, marital status and the number of children the teacher has of his/her own; and situational variables of the number of pupils per class, and the type of school to the three dimensions of burnout, was also explored.

The results of the study will be discussed in relation to the theories and research findings of previous studies mentioned in chapter two. Before discussing the results of the present study, it must be pointed out with regards to the interpretation of data analysed in terms of biographical sub-groups, that any random sample of teachers is a sample of those teachers who have remained in the profession. Others, for numerous reasons, one of which may be the experience of stress, have left. Furthermore, the older teachers may differ, not only in being older, but of a different generation with possibly different attitudes, values and expectations regarding teaching. Such considerations indicate that although the present study may allow general patterns to be identified, the explanation of such patterns may be very complex.

It is impossible to explore one aspect or interaction within the stress system in isolation. This discussion, therefore, attempts to emphasise and explain the most significant relationships between variables. Although there is overlap among the various sections, separate headings will be used in the discussion.

5.2 The Relationship between Demographic Variables and the Three Dimensions of Burnout

5.2.1 Gender

Consistent with Kyriacou and Sutcliffe (1978), Pierce and Molloy (1990), and Solman and Fled (in Fontana and Abouserie (1993), the present study found no significant relationship between either of the three dimensions of burnout and the gender of the

teacher (4.4.1). As there was no significant relationship, the imbalance in the composition of the present study's sample (with 65% being female, and 35% being male, as indicated in 4.3.1), may not have a significant effect on the results of the study with regards to the burnout dimensions.

The results did, however, reveal that males experience more depersonalisation and personal accomplishment than females, while females experience more emotional exhaustion, which is consistent with Maslach and Jacksons' (1981a) findings. However, as has been said, the results of this study were not significant. The fact that there was no significant relationship found could be explained by the changing roles of men and women in society with women becoming more career oriented and determined. Maslach (1982b) suggests that as women are generally more emotional than men, they may become more emotionally involved in their jobs and hence experience emotional exhaustion. However, the modern career oriented women may see her work as simply a job, and therefore not become emotionally involved. Men on the other hand may not be as unemotional as Maslach (1982b) suggests and may therefore experience less depersonalisation and more personal accomplishment. In other words, men and women may experience stress in the workplace in similar ways.

5.2.2 *Age*

The present study's findings were similar to that of Schwab (1986) who found that younger teachers experienced more emotional exhaustion than their older colleagues. Maslach and Jackson (1981a) found a significant correlation between both the Emotional Exhaustion and Depersonalisation subscales and the age of the teacher. These results were also found in the present study (4.4.2). In other words, younger teachers reported being more emotionally exhausted and depersonalised than older teachers. Many reasons may account for this. Younger teachers may still be trying to establish their careers and "prove themselves" to both their pupils and their colleagues. They may therefore, overextend themselves. This may be associated with their limited work experience where time management and expectations may play a part. Having limited experience with preparing lessons and expecting themselves to perform on the same level as their older colleagues, a young teacher may begin to feel emotionally exhausted and loose interest in his/her pupils and work. Younger teachers also need to familiarise themselves with the curriculum and establish their preferred teaching styles which may be a stressful task for some. Referring particularly to South Africa, many young teachers may find themselves teaching pupils their own age or older. This may

prove quite threatening for the teacher and create a fair amount of stress in terms of trying to control the class and gain respect from those older than oneself.

5.2.3 *Marital Status*

The findings of this study revealed that a significant relationship between marital status and depersonalisation exists, but that no significant relationship was found between Personal Accomplishment and Emotional Exhaustion (4.4.3). Cedoline (1982) found married subjects to experience less depersonalisation than single subjects and this was consistent with this study's findings. This may be explained by the fact that married teachers have the support of their spouse and family and also have other things to occupy themselves as opposed to concentrating solely on work. Furthermore, by involving themselves in their families, they may not over-involve themselves in their work and their pupils. As a possible consequence they may enjoy their pupils and colleagues as opposed to seeing them as mere objects.

5.2.4 *Number of Children the Teacher has of his/her own*

Both Depersonalisation and Personal Accomplishment were significantly correlated to the number of children the teacher has, where the more children one has, the less depersonalised one feels; and the more personal accomplishment is experienced (4.4.4). Therefore, it appears that having children is a buffer against stress. Again, as was mentioned previously, having a family is a means of social support which is in itself a stress reducer. Many of the reasons for these results have already been discussed which apply here as well. For example, teachers with children are usually married (and married subjects experienced less depersonalisation than unmarried) (Cedoline, 1983) therefore the reasons mentioned in 5.2.3. may apply here. Furthermore, these respondents, having established their careers, may perhaps be more able to cope with work stress. Also, as mentioned in 5.2.2, parents who are teachers may not preoccupy themselves with teaching as they have a family to consider.

5.3 The Relationship between Organisational Factors and the Three Dimensions of Burnout

5.3.1 Average number of pupils per class

Many studies have indicated that class size is a significant source of stress for the teachers (Cedoline, 1982; Pierce and Molloy, 1990; French, 1993; Pretorius, 1994). Pretorius (1994), in a study using the same burnout inventory, found that the number of students in a class was a significant predictor of emotional exhaustion and depersonalisation. These results are consistent with this study where the more pupils taught per class, the more emotional exhaustion and depersonalisation was experienced (4.6.1). This result may seem obvious as the more pupils a teacher deals with, the more energy and effort it takes to teach, control and motivate the pupils. Although this is true, a further reason should be considered which is central to burnout, and that includes the lack of rewards after giving so much of oneself (Freudenberger, 1983; Glowinkowski and Cooper, 1985; Huston, 1990; Burke and Greenglass, 1993). As a consequence the teacher not only becomes exhausted, but begins to see his/her pupils as objects and may lose interest in teaching altogether.

This has serious implications for educational institutions in South Africa, given the fact that many schools have been obliged not to turn away students. Classes are increasing in size and teachers are being retrenched. Hence, the teacher-pupil ratio is increasing. It appears from these results that school principals are going to have to play a crucial role in protecting the teachers from becoming burnt out and/or leaving the profession.

5.3.2 Type of School

Pierce and Molloy (1990), in their study of 750 teachers from 16 government and non-government schools in Australia, found the type of school to play a part in the level of teacher stress. In South Africa, it is generally accepted that government schools have larger classes than private schools, and therefore it is of no surprise to find that in light of the relationship between the number of pupils taught per class and the experience of burnout (discussed in 5.3.1), that the type of school showed a highly significant positive correlation with Emotional Exhaustion and Depersonalisation, and a negative correlation with Personal Accomplishment (4.6.2). Government school teachers reported more emotional exhaustion, more depersonalisation and less personal accomplishment than private school teachers, and therefore experienced a significantly higher level of burnout (as indicated by Maslach and Jackson (1981b and 1986) ie. a

high score on emotional exhaustion and depersonalisation, and a low score on personal accomplishment is regarded as burnt out). Research comprising indepth case studies of schools could be suggested that would help to pin-point the reasons for these differences and identify the parameters related to the responses of the teachers working in different types of schools.

Changes in South African education are taking place more rapidly in government schools than in private schools. In government schools, many other factors, other than the size of the classes, may impact on the level of stress experienced. For example, curricula changes, changing demographics of the pupils, and an uncertain future, may be factors more relevant to government school than private school teachers. With these factors being a concern for teachers in government schools, one cannot ignore the effect it may have had on the responses to the Maslach Burnout Inventory. In light of this, attention must be brought to the Introduction (5.1) of this chapter where it was emphasised that there are no simple explanations for the results of any study concerning burnout. Therefore, although the results of this study reveal a correlation of a broad variable (type of school) to the three dimensions of burnout, many factors may explain this relationship (ie. it may not be the actual school that is a source of burnout, but the factors relating to the school).

5.4 The Relationship between Personality Variables and Burnout Dimensions

The literature seems to suggest that although individual personality characteristics are associated with burnout, no conclusive evidence has been found that is consistent (Maslach, 1982; Burke and Greenglass, 1993 and 1995). Using the Eysenck Personality Questionnaire (EPQ) on a sample of 95 school teachers, Fontana and Abouserie (1993) found a significant negative correlation between stress and extroversion, and a significant positive correlation between stress and neuroticism. The results of this study were similar where a significant positive correlation between neuroticism and Emotional Exhaustion was found; and a significant negative correlation between neuroticism and Personal Accomplishment was shown (4.7.1). In other words, a person with a high level of Neuroticism would experience more emotional exhaustion and less personal accomplishment than a person with a low level of Neuroticism. Neuroticism was associated with the increased use of wishful thinking, escapist fantasies, self-blame (McCrae and Costa, 1986, Van der Merwe, 1993) hostile reactions; indecisiveness (McCrae and Costa, 1986) with regards to coping with stress. High Neuroticism scores on both the EPQ and Neo-FFI characterise the person who is irrational, anxious, depressed, has less ability to control

his/her impulses, and to handle stressful situations (Costa and McCrae, 1992; Eysenck, 1947 and 1977; Fontana and Abouserie, 1993). According to Fontana and Abouserie (1993) a person with a high Neuroticism score may not be able to cope with the stresses involved in teaching.

Having the characteristics of a neurotic person would influence one's life and work in that one may have low morale, experience a reduction in one's capability and be unable to cope (i.e. experience very little, if any, personal accomplishment). The characteristics of a neurotic person may result in the person experiencing a lack of interest and concern for work and others (Costa and McCrae, 1992). These experiences are also felt when one is emotionally exhausted, which could explain the correlation between Neuroticism and Emotional Exhaustion. Furthermore, the negative emotions of neurotics may lead them to create more negative events for themselves (Magnus et al., 1993). As said in chapter two, neurotics may avoid situations because they find them anxiety provoking, but as a consequence this avoidance may lead to negative experiences.

The results of this study also revealed that extroversion was significantly positively correlated to Personal Accomplishment, where the more extroverted the teacher was, the more personal accomplishment experienced (4.7.2). The typical extrovert is sociable, craves excitement, is spontaneous and upbeat (Eysenck 1977 ; Costa and McCrae, 1982), and such characteristics may enable the teacher to be a more effective copier than an introvert teacher in stressful situations (Fontana and Abouserie, 1993), and therefore experience more personal accomplishment. McCrae and Costa (1986) found that extroverts tended to use rational action, positive thinking substitution, and restraint to cope with stress; and Magnus et al., (1993) found that individuals with higher extraversion scores reported more favourable life events. An extravert might have more friends therefore have more positive and enjoyable social events. With the uncertain climate regarding education in South Africa, the characteristics of an extrovert would enable the teacher to adapt to changes and tolerate them, thus possibly avoiding burnout.

The personality domain of Conscientiousness was found to relate negatively with Emotional Exhaustion and Depersonalisation, and positively with Personal Accomplishment (4.7.5). This suggests that the more conscientious one is, the less emotional exhaustion and depersonalisation is experienced; and the more the feeling of personal accomplishment. These results were however not significant. A similar result was found with Agreeableness where the more agreeable one was, the less emotional

exhaustion and depersonalisation was felt (4.7.4) and the more personal accomplishment was experienced. However, these results were not significant and therefore cannot be considered a source of burnout in this study's sample of teachers. Agreeableness- and Conscientiousness- related characteristics are assumed to create situations and life experiences that have strong emotional consequences. Thus, "the interpersonal bonds that Agreeableness fosters and the achievements and accomplishments that Conscientiousness promotes may contribute to greater quality of life and higher life satisfaction" (McCrae and Costa, in Watson and Clark, 1992, p. 470). This relationship suggests that higher levels of Agreeableness and Conscientiousness foster the types of interpersonal and achievement - related experiences that lead to greater life satisfaction (ie. feelings of personal accomplishment, with little or no emotional exhaustion and depersonalisation, and hence, no experienced burnout). With regards to the Openness to Experience domain, it was found that teachers scoring high on the Openness domain, reported more emotional exhaustion and personal accomplishment and less depersonalisation than those scoring low on the domain (4.7.3). However, these results were also not significant, and cannot be considered a source of burnout in this study.

On the whole it appears from the results of this study that of the five domains measured by the Neo-FFI, Neuroticism and Extraversion related most to the burnout dimensions.

5.5 Predictors of the Three Dimensions of Burnout

A Stepwise Multiple Regression analysis of demographic and personality variables on the dimensions of burnout was performed, and the results indicated that of the variables in the study, the personality domain, Neuroticism, had the best relationship with Emotional Exhaustion; with the type of school further predicting this dimension. This suggests that a person with neurotic characteristics (ie. prone to be less able to control impulses, have irrational ideas, and experience negative affects such as anger, fear, sadness, guilt and disgust) may experience a high level of emotional exhaustion. The type of school in which one taught appeared to best determine the level of depersonalisation experienced. Age was found to be the next variable to determine the level of depersonalisation. Being an extrovert (ie. being sociable, spontaneous, optimistic, and active) is the predominant predictor in determining the amount of personal accomplishment felt; with the number of children the teacher has as the next best predictor. A third predictor (Neuroticism) was added to this dimension as another good predictor.

The above variables were found to play a predominant role in determining the levels of the burnout dimensions. However, it may be important to note that the variables involved in predicting the three dimensions of burnout are all quite different. This may give weight to the already mentioned argument (in chapter two) that the three dimensions are distinct constructs with different dominant predictors.

5.6 Means and Standard Deviations of the Teacher Population

5.6.1 Means and Standard Deviations of the Dimensions of Burnout

On the basis of this study's data and preliminary findings, a comparison of mean burnout scores for this sample versus that of Maslach and Jackson's (1986) sample of teachers, was made (see 4.7 for the comparison).

As no details of Maslach and Jackson's (1986) sample of teachers are given, an explanation regarding the above comparison cannot be made. However, factors that could possibly have made an impact on this sample's high level of emotional exhaustion include the average number of pupils the teacher has to teach per class (4.5.1). Cedoline (1982), Schwab, (1986), Pierce and Molloy (1990), French (1993) and Pretorius (1994) all found the number of pupils/students to be significant with regards to managing, educating, and providing care. Furthermore, it was found in this study (4.6.4) that teachers at government schools experienced more emotional exhaustion than private school teachers, and as the majority (64%) of the sample taught at government schools, this may account for the higher levels of emotional exhaustion than the other sample. However, as no details are known as to the type of schools the teachers in Maslach and Jackson's sample taught at, this cannot be concluded, and must be regarded as an assumption.

With regards to the low level of depersonalisation, an explanation is difficult. These results are not consistent with previous research (Pretorius, 1994) where if a high level of emotional exhaustion is experienced a high level of depersonalisation and a low level of personal accomplishment is usually found (Maslach and Jackson, 1981b). One explanation for this result could be the fact that of the total sample, 71% were married and as shown in 4.4.3, married subjects were found to experience a significantly low level of depersonalisation. Essentially then, the present sample is not burnt out as classified by Maslach and Jackson (1981b), but do experience a high level of emotional exhaustion (which is considered central to burnout by Leiter (in Byrne, 1994) because

it is considered to be the most responsive to various stressors in the teacher's work environment). The results of this study may therefore highlight the argument that the emotional exhaustion, depersonalisation, and personal accomplishment operate as conceptually distinct constructs.

5.7 **Conclusion**

In this sample of teachers, it would appear that the results confirm the prevalence of high levels of stress among school teachers, particularly those employed in government schools. These results emphasise the need for further investigation into the stressors in teachers' work, and for identifying ways in which those whose personalities render them more vulnerable to stress can be afforded some degree of protection.

The concept of burnout as reflected in the findings of this study appears to be much more complex than is generally assumed. As yet there is no way of telling whether or not the MBI measures burnout correctly when it isolates the three dimensions. That only one variable, the type of school, was significantly related to the three dimensions of burnout in the sense that burnout (as indicated by Maslach and Jackson (1981b and 1986) was experienced is an interesting finding. The fact that only one or two of the dimensions correlated with each of the independent variables may suggest that the other dimensions on each analysis have their sources more or less in variables other than demographic or personality variables.

The aim of this study was to begin the process of isolating those variables with a significant relationship to burnout, and furthermore, to explore the sources of stress inherent in the specific occupational setting. It is evident from this study that further research is needed to fully understand this occupational stress system, and suggestions to this end will be made in the next chapter.

One may therefore conclude that if burnout is present it can be related to any one of a number of different sources. These need not be related to stress at all. A new model for understanding burnout and dealing with its causes is needed. More specifically a model integrating personality and life events must emerge.

CHAPTER 6

CONCLUSION

In terms of the personal demographic factors that were explored in this study, no significant relationship was found between the gender of the teacher and the dimensions of burnout (as measured on the Maslach Burnout Inventory). The younger teachers in the sample experienced significantly more emotional exhaustion and depersonalisation than their older colleagues; with no significant relationship being found between personal accomplishment and the age of the teacher. Married teachers experienced less depersonalisation than their single colleagues; with no significant relationship being found with either emotional exhaustion or personal accomplishment and marital status. It was also found that those teachers with children experienced less depersonalisation, and more personal accomplishment than those without children (No significant relationship existed between emotional exhaustion and the number of children).

Regarding the organisational factors, the results indicated that more emotional exhaustion and depersonalisation was experienced when the average number of pupils taught is high. No significant relationship was found between personal accomplishment and the number of pupils taught. It was also found that the type of school taught at had a highly significant correlation with the dimensions of burnout where teachers teaching at government schools experienced more emotional exhaustion and depersonalisation, and less personal accomplishment than those teaching at private schools.

In terms of the five personality domains measured by the Neo-Five Factor Inventory, it was found that subjects scoring high on Neuroticism reported experiencing more emotional exhaustion and less personal accomplishment than those who scored in the low range. No significant relationship was found with depersonalisation and Neuroticism. Subjects with a high score on Extraversion, reported feeling more personal accomplishment than those who scored in the low range. No significant relationship was found between Extraversion and either emotional exhaustion or depersonalisation. No significant relationships were found with the Openness, Agreeableness, or Conscientiousness domains, and the three dimensions of burnout. These results may have been partially obscured by a number of confounding variables, as will be discussed below.

6.1 *Limitations of the Study*

Although self-report questionnaires are useful and worthwhile, more objective measures are needed to show a clear association between individual perceptions of stress and independent, objective indicators. As was mentioned in 3.3, one may also find responses affected by what the respondent feels is socially desirable. This may be particularly true in a study such as this where teachers may want to give the impression that they are coping well and will not admit to feeling burnt out.

It must also be acknowledged that correlational studies are limiting due to their incapacity to demonstrate causality. However, as the stress system is both complex and dynamic, it does not easily lend itself to reductionist or simplistic research. Few (if any) of the relationships between variables can be considered unidirectional. The nature of the study allowed for an investigation into the relationships of the variables to the burnout dimensions, succeeding in illustrating the dynamic nature of the system of occupational stress. Numerous factors impacting on the stress system are not accounted for (or in some cases inadequately accounted for) in this study, but may confound the results. Furthermore, interpretation of the results involved some assumptions which at times generated more questions than it answered.

As burnout relates to feelings these may be influenced by particular events on particular days or over certain periods of time, and therefore sources of a person's stress and burnout must be viewed in light of this. With this in mind, to improve the accuracy of the findings it would possibly have been better to do the survey at regular intervals rather than at only one specific time of year. This is particularly relevant in this study where the questionnaires were completed (with the majority of the sample) over the exam period (June), and therefore the responses may have been influenced by events during that time, such as exam marking, deadlines, and report writing. Simply having teachers perceive 'exam time' as a stressful period during the year may have had an impact whether the teachers actually were stressed or not. Furthermore, the data from the government school that was collected in July may also have been influenced by the time of year in the sense that the teachers had just returned from the school holidays. Although the data collected in July correlated to that collected in June, subtle influences regarding the time of year must not be overlooked, and may have influenced the results of this study.

The time of year chosen to do this research also proved problematic in that teachers were preoccupied with other things. This jeopardised the return rate of the questionnaires. It would have been better to have performed the research at a time of year when the researcher would be able to administer the questionnaires to all the schools during a lunch break or a staff meeting.

Lastly, an area that was not covered in this research but which may have proved useful, is that of coping strategies. Investigating the preferred and most effective coping strategies with regard to personality variables may provide important information for assisting teachers to cope with stress in teaching.

6.2 Indications for Future Research

Several potential research avenues have arisen out of this study's findings.

Firstly, the study looked at demographic factors such as marital status and number of children, and their relationship to burnout, but did not consider the impact of the home-work interface as such. It is clear from the literature that home factors and relationships are significant both in terms of their contribution to occupational stress and burnout as well as their ability to mediate its negative effects. Relationships and life at home also do not escape the effects of stress at work. The dynamic feedback system that exists between home and work, along with the role of social support, need further consideration.

Secondly, although using the Maslach Burnout Inventory was appropriate in this study as certain potential stressors had already been chosen for exploration, it has been suggested by Cooper (1995) that a teacher - specific measure is needed that is comprehensive enough to incorporate job, organisational, and personality predispositions. This would seem appropriate considering the number of stressors unique to teaching.

Thirdly, if one is to accept that burnout is a progressive syndrome, research into the long term process may be needed. Longitudinal research designs could incorporate test-retest measures to promote a better understanding of critical factors in the process of burnout.

Fourthly, using the Neo-PI-R instead of the Neo-FFI, would possibly give a better indication of the relationship between more specific personality characteristics and burnout.

Lastly, an area of research that has been explored to some extent, but needs more research, is that of coping strategies and personality. Although researching the sources of burnout is necessary, as suggested previously, to suggest, for example, that social support strategies are effective in all situations is to misunderstand the role of personality and coping strategies. To develop teachers to deal more effectively with the pressures imposed on them, one must understand which coping strategies are most effective with certain stressors.

The changing face of education in South Africa has an impact not only on the pupils, but more so on the teachers, and this is cause for concern. It would seem that once the sources of occupational stress in the teaching profession are identified, effective coping strategies can be developed.

This study has made an attempt at finding the sources of occupational stress exploring the relationship between certain demographic and personality variables to the three dimensions of burnout. Although the demographic factors were generally found to be consistent with the literature, it would seem that more exploration is needed regarding the role of personality in the stress system. This study has made a start and found significant results with regards to certain domains of personality.

These are just a few of the challenges facing Educational Psychologists today and it is hoped that one can help teachers deal with the changes taking place in education, rather than leave the profession all together.

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APPENDIX 1

MASTERS RESEARCH PROJECT

STRESS IN TEACHERS AND RELATING FACTORS

Thank you for participating in this project. It is greatly appreciated and will be treated with the utmost confidentiality (names are not required).

Please fill in the following as thoroughly as possible. It should take approximately 20 minutes to complete.

Thank you.

Heidi Rutsch

Jacqui de Haas (Supervisor)

Heidi Rutsch

Jacqui de Haas

Demographic Data

Age: _____

Gender: _____

Marital Status: _____

No. of Children: _____

Average No. of pupils in class: _____

Government or Private School: _____