EXTRAVERSION, NEUROTICISM AND COPING AS VARIABLES IN THE STRESS AND BURNOUT PROCESS: A PILOT STUDY USING A POPULATION OF CHILD CARE WORKERS

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THE AUTHOR HEREBY DECLARES THAT THIS THESIS, UNLESS SPECIFICALLY INDICATED TO THE CONTRARY, IS A PRODUCT OF HER OWN WORK.

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ABSTRACT

Personality, ways of coping and occupational burnout were examined within the context of child care work, using a number of self-report questionnaires. Subjects included 70 full-time child care workers from children's homes in the Natal-KwaZulu area. The subject sample was treated as one group, as environmental sources of stress were perceived more or less consistently across the population. Stepwise multiple regression was used to assess the relationships between personality (neuroticism, extraversion) and ways of coping and the three facets of burnout (emotional exhaustion, depersonalisation and personal accomplishment). Demographic variables such as age and experience were also explored.

Varying degrees of burnout were found, with particularly high levels of diminished personal accomplishment. Both emotion- and problem-focused coping strategies contributed significantly to the burnout response, with emotion-focused coping being the most frequently reported coping strategy. Significant relationships were found between personality and burnout. Neuroticism contributed a significant proportion of the variance in all three dimensions of burnout, particularly emotional exhaustion and depersonalisation. Extraversion and psychoticism contributed significantly to higher levels of personal accomplishment.

A significant relationship was found between personality and ways of coping. Neuroticism contributed significantly to the prediction of emotion-focused coping strategies, particularly wishful thinking and self-blame. Extraversion was found to contribute significantly to problem-focused coping and growth-oriented coping. Demographic variables, particularly age and experience, were found to influence both burnout and coping responses. Ethnic identity was found to influence the coping strategies used.

The results were discussed primarily in terms of their function as defenses, or as efforts to adapt (successfully or unsuccessfully) to the stress being experienced, and as vulnerability factors. The importance of contextual factors in the stress and burnout process, particularly within the current South African context, was highlighted. Recommendations for future research were made.

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CHAPTER ONE

INTRODUCTION

1.1 OVERVIEW

The present chapter of this study provides a brief summary of the research aims and their theoretical background. The second chapter elaborates on the theoretical overview of the major areas of interest. The third chapter examines the methodology used in the present study, and the fourth chapter provides a summary of the research results. This is followed by a discussion of the findings, a critique of the study and conclusions and recommendations for future research.

The present research undertook to examine the finding that some individuals successfully mediate environmental stress, while others, in similar settings, are unable to do so. Focusing on individual differences, this study investigated the role of personality and coping in the stress system. This was explored in terms of Eysenck and Eysenck's (1975; EPQ) personality constructs of extraversion-introversion and neuroticism, and Maslach and Jackson's (1981; MBI) three-pronged conceptualisation of burnout. It was proposed that these variables would be significantly related to the coping efforts that are most frequently chosen and adopted by individuals (assessed using an adapted version of the Ways of Coping Checklist, Folkman & Lazarus, 1980). Associations with demographic variables such as age and experience were also investigated. Because of the dynamic and complex nature of the stress system, it was impossibl to investigate relationships between variables in isolation in order to determine causality. This study aimed instead to highlight the most striking relationships between variables, to attempt to account for them, and to inquire into their theoretical (and to a lesser degree, their practical) implications.

1.2 RATIONALE

Perlman and Hartman (1982) argue that the concept of burnout has frequently been perceived as an organisationally induced phenomenon, and has been used primarily as a descriptive term (e.g. Maslach & Jackson, 1986). Although research documents the association between various factors in the work environment and burnout (e.g. case load and role ambiguity), many of these studies overlook the potentially mediating and moderating effects of individual difference variables (Furnham, 1992; Matthews, 1992). Research has also focused on individual difference, or "trait-like", correlates of burnout; (e.g. Amirkhan, Risinger & Swickert, 1995; Hart, Wearing & Headey, 1995; Korotkov & Hannah, 1994; Manlove, 1994; Matthews, 1992). This has furthered the explanatory precision of burnout, linking it to the broader established literature on occupational dynamics. For example, by evaluating Maslach and Jackson's (1981) constructs of burnout (See `Burnout', below) within the context of a comprehensive personality taxonomy such as that developed by Eysenck and Eysenck (1975), interpretive meaning can be supplied to the motivational and interpersonal roots of burnout (Black, 1991; Furnham, 1992; Manlove, 1993; Piedmont, 1993). If Maslach and Jackson's (1981) measures of burnout do indeed capture aspects of personality, then meaningful correlations with specific dimensions of personality should be expected. Such associations would provide a new facet to the interpretations of scores from this test and to the construct of burnout generally (Black, 1991).

Piedmont (1993) reviews studies that assessed the contribution of personality to the burnout experience when situational variables were controlled. Personality continued to account for a significant, if not major, portion of the variance in burnout scores. It seems that although features of the environment may show strong associations with burnout, and may indeed serve as the catalyst for predispositions, not all people in a given setting experience burnout (Black, 1991; Kasl & Rapp, 1991). The long-term stability of burnout scores and their correlation with subjective well-being measures indicate the possibility that burnout may reflect enduring qualities of the individual, with these predispositions being more powerful predictors of psychological distress than

environmental factors (Manlove, 1993).

Furnham (1992) comments upon the relative lack of research into occupational issues and individual differences generally, notably within the context of stress and personality. Further, the literature on occupational stress and individual differences has seldom been employed in relation to child care work, which represents a growing occupational group that is particularly vulnerable to burnout (Curbow, 1990; Manlove, 1994; Pearce, 1990; Savicki, 1993). The research that has been conducted in this area has demonstrated significant relationships between stress and individual influences such as demographic variables, neuroticism, extraversion and coping: areas which seem ripe for further examination (Anglin, 1993; Koeske, Kirk & Koeske, 1993; Manlove 1993; Manlove, 1994; Matthews, 1992; Savicki, 1993).

1.3 THEORETICAL FRAMEWORK

Characteristics of the person, characteristics of the environment, and the interaction between these, further the understanding of stress (Ross & Altmeier, 1994). Kasl and Rapp (1991) note the many unresolved issues regarding the concept of stress that emerge. For example, is stress to be conceptualised as a stimulus condition, a response, or a complex transactional term or process? Are there unique criteria for defining stress as a stimulus or a response? Given these difficulties, they propose to focus on the "stress-disease association", which enables the adoption of an aetiological perspective where both stress and individual variables are seen as potential risk factors for, or antecedents to, health outcomes. They argue that this moves the concept of stress into the category of a stimulus condition (i.e. a stressor) in relation to health outcome, but does not rule out using stress also as an acute response (i.e. distress) which can be antecedent to a more distal health outcome.

Burnout is considered to be the derivative of ongoing, unmediated (or unsuccessfully mediated) stress, experienced particularly by those people working in emotionally charged interpersonal contexts (Manlove, 1993). Maslach (1982) notes that burnout is

generally agreed to be an individual, internal and negative process, involving distress and dysfunction. Perhaps one of the most widely known models of burnout is that proposed by Maslach and Jackson (1981), which presents burnout as consisting of three dimensions: emotional exhaustion, depersonalisation and diminished personal accomplishment (assessed using the Maslach Burnout Inventory, MBI; see `Burnout' below).

Because burnout has been linked to criteria associated with levels of well-being (such as job satisfaction and health status), it seems reasonable to conclude that burnout should correlate with those personality dimensions that underlie well-being. As discussed above, Piedmont (1993) shows that levels of subjective well-being are strongly linked to specific predispositions, with environmental influences playing a relatively minor role. Positive and negative affectivity, or the disposition to experience positive and negative emotional states respectively, have frequently been measured using extraversion self-reports such as the Eysenck Personality Questionnaire (EPQ; Eysenck & Eysenck, 1975).

Further, "the personality traits of optimism, locus of control, neuroticism and extraversion have all been linked to situational coping strategies in one or other study" (Carver, Scheier & Weintraub, 1989, p.281). The appraisal of a particular person-environment relationship as anxiety-provoking, with subsequent experience of stress, is usually associated with changes in psychological and physiological function some of which are attempts at coping (Cohen, Kessler & Gordon, 1995; Lazarus, 1966; Lazarus & Folkman, 1984). The appraisal is mediated by individual differences, and the coping which may follow varies between individuals. This variation may moderate the stress-outcome relationship. Coping is, in a sense, an individual-difference variable (Amirkhan et al, 1995; Cooper & Payne, 1992; Lu, 1995; Monroe & Kelley, 1995). As such, it is likely that personality differences inhere in the way that people cope with stress. What kind of people cope successfully with their stress and why? Indeed, Carver et al (1989) state that people have relatively stable coping preferences, and that these preferences may therefore be viewed as functions of personality.

CHAPTER TWO

THEORETICAL ISSUES

2.1 INTRODUCTION

This chapter reviews some of the background behind the concepts of stress, occupational stress, burnout and coping. Individual differences are explored in terms of personality (extraversion and neuroticism) and coping. Although the latter perhaps belongs on a slightly different conceptual level, it is nevertheless regarded as an individual difference variable. Demographic factors are also discussed briefly. The field of child care work is then explored in terms of these concepts. The chapter ends with a summary that returns the focus to the present study.

2.2 STRESS, OCCUPATIONAL STRESS AND BURNOUT

2.2.1 STRESS

Although the term "stress" is understood by everyone when used generally, it has no single agreed upon definition (Ross & Altmeier, 1994). Some researchers have gone so far as to say that the term stress has so many meanings it is a useless concept (Cohen et al, 1995). This is primarily a result of the use of the term in a number of different contexts. For example, stress may either be treated as a stimulus which impinges on a person, or as a reaction experienced by a person in response to a stressor. These approaches have both been found to be inadequate, as they fail to account for the individual differences evident in relation to stress, and the cognitive processes which underpin these differences (Ross & Altmeier, 1994).

Transactional models (developed notably by Lazarus, 1966; 1993) have attempted to overcome these weaknesses by treating stress as an internal representation of particular, problematic transactions between a person and his or her environment. These transactions are imbued with meaning, or evaluated, through the process of appraisal (see "Coping" below). The experience of stress is therefore determined not solely by the stimulus condition or the response variable, but rather by peoples' *perceptions* (whether accurate or inaccurate) of their relationship to their environment (Cohen et al, 1995). When environmental demands are perceived to exceed the ability to cope, people experience concomitant psychological and biological changes that may place them at risk for disease[1].
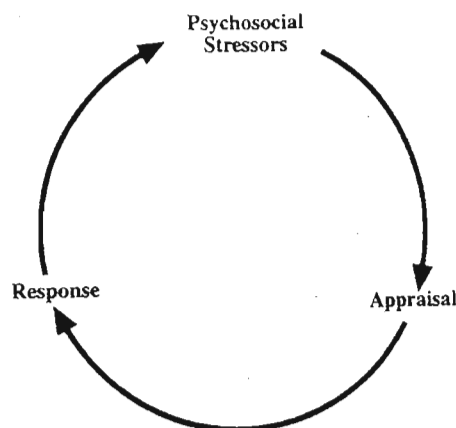
Figure 1. A schematic diagram of the transactional model of stress and the appraisal process (from Monroe & Kelley, 1995, p. 127).

Figure 1 above provides a highly simplified schematic diagram of the transactional model of stress and the appraisal process. The organism is confronted with psychosocial stressors, appraises the stressors, and responds. In accord with this

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[1]   Cohen et al (1995) notes that one should not exclude the as yet relatively unexplored possibility that the effects of occupational stress may be positive, in increasing motivation, personal growth, increased self-efficacy and the strengthening of social networks.

model, these responses in turn influence the stressors, which in turn are reappraised, through an evolving and dynamic cycle of stress appraisals, responses, and alterations in the stressors.

The central position of perception in stress theory helps to explain individual differences in stress responses and outcomes. Monroe and Kelley (1995) refer to increasing interest in what they term `vulnerability factors'. These refer to the nature of people and their contexts that makes them more or less vulnerable to stress-induced disease, by accentuating or short-circuiting the stressor appraisal respectively. They note that differential vulnerability to the health-damaging effects of environmental stressors has been documented by a number of researchers (see Cohen et al, 1995, for a review).

In this study, an attempt is made to account for individual differences (personality and coping) in the appraisal of potentially stressful conditions. The circumstances perceived to be stressful are presumed to be constant, as subjects were sampled from similar working environments.

2.2.2 OCCUPATIONAL STRESS

Research into occupational stress, as in all areas of stress, is complicated by the use of a variety of different approaches. Sutherland and Cooper (1990) note that occupational stress is traditionally defined in terms of poor person-environment fit, but that these models infer a static situation, as opposed to the dynamic phenomenon that the stress process is.

Transactional models such as those developed by Cox and Mackay (1978), Hurrel (1989) and Sutherland and Cooper (1990) propose that stress arises when the work conditions interact with the characteristics of the worker "such that the demands of work exceed the ability of the worker to cope with them" (Ross & Altmeier, 1994, p.13). This is supported by the abundance of literature which finds a link between workplace conditions and physical and mental health (e.g. Schmitz, 1992). The negative impact

that this has had upon the individual, the home, the family and the workplace has resulted in a surge of public and professional interest in occupational stress over the last two decades (Cordes & Dougherty, 1993).

2.2.3 BURNOUT

The term `burnout' was first used by Freudenberger (1974) to describe the physical and emotional symptoms that he observed in residential child care workers. The distinction between burnout and stress has not been clearly delineated, and the two are generally agreed to exist within a complex interactive process of ongoing (unmediated or unsuccessfully mediated) occupational stress (Cordes & Dougherty, 1993; Ross & Altmeier, 1994).

Maslach (1982) argues that it is nevertheless possible to identify a common core of general agreement regarding the phenomenon of burnout. This considers burnout to be an individual, internal, negative psychological experience resulting from chronic emotional stress. Burnout is also recognised as playing a primary role in the inadequate delivery of health, education and welfare services (Manlove, 1993; Pines & Aronson, 1981). Further, it seems to be agreed that burnout is an ongoing process, that it is multidimensional and that it has a developmental pattern (Basson & van der Merwe, 1993; Cohen et al, 1995; Cordes & Dougherty, 1993).

Cordes and Dougherty (1993) highlight how the distinction between stress and burnout has been operationalised through Maslach and Jackson's (1981) widely accepted three-component model of burnout. They note that at its core is emotional exhaustion, which is traditionally regarded as a stress-related variable. The second component, detachment from or depersonalisation towards those being served, has not featured formerly in the stress literature (Jackson, Schwab & Schuler, 1986, in Cordes & Dougherty, 1993). Finally, although feelings of personal accomplishment (related to concepts such as self-efficacy) are familiar to the stress literature, a diminished level of this variable adds to the assertion that self-evaluations are central to the burnout experience.

The present study is concerned with the interactive nature of individual differences and burnout, in an attempt to elucidate the coping strategies and personality traits which moderate the burnout process. The role of individual differences in burnout and coping is discussed below.

2.3 COPING

Well-being is influenced not only by stress, but also by how people cope with stress. Hence coping is regarded as central to the stress process (Lazarus & Folkman, 1984). Cox (1987, in Cox & Ferguson, 1991) offers a simple definition of coping, which need not imply success:

> the cognitions and behaviours adopted by the individual, following the recognition of a stressful transaction, that are in some way designed to deal with that transaction.
> (p.19).

Coping is generally presumed to fulfil two main functions: solving the problem and regulating the emotion evoked by the problem (Lazarus, 1993). Problem-focused coping involves activities directed towards modification, avoidance or minimisation of the impact of a stressor, or cognitive activity that leads to the belief that the stressor can be controlled. Emotion-focused coping includes attempts to eliminate or alleviate the negative emotions elicited by a stressor, at the same time avoiding direct confrontation with the stressor. Although these efforts typically co-occur and their effects can be difficult to disentangle, they closely parallel a distinction that is prevalent in the coping literature (Endler & Parker, 1990). In an attempt to discriminate more finely however, strategies such as wishful thinking/escape, acceptance, help-seeking, emotional withholding, self-blame and growth have been included in coping typologies such as the Ways of Coping Checklist (Folkman & Lazarus, 1980, adapted by Eagle, 1987).

Lazarus and Folkman (1984) give particular attention to the factors that contribute to variability in coping behaviours, which are argued to arise through an interaction of situational and personality factors or predispositions (Steptoe, 1991). The latter provide "orientations towards stimulus objects" (Eagle, 1987, p.20), impacting upon the perception of potential stressors which, in turn, impact on coping. This occurs through primary appraisal (where an event is evaluated in terms of harm or loss, threat or challenge), and secondary appraisal (which evaluates the availability of coping resources and their likely effectiveness).

Amirkhan et al (1995) state that although situational factors (including levels of burnout) may be essential to the precise prediction of coping responses, research suggests a larger role for personality determinants of the coping response than has been traditionally held. It is proposed that after repeated exposure to life stress, people come to adopt a preferred mode of coping. For example, exposure to stress and dispositional coping style have been implicated in the onset of chronic disease such as coronary heart disease (Schmitz, 1992). This is not to imply that coping behaviours are invariant across stressors; rather, it is suggested that different personalities have affinities for different strategies, which they carry with them into stressful episodes, and which they can change according to situational demands (Steptoe, 1991).

There have been many attempts to measure various dimensions of coping activity, for example Billings and Moos (1981), Pearlin and Schooler (1978) and Folkman and Lazarus (1980). Koeske et al (1993) and Lazarus (1993) state that the measurement of coping strategies is not highly developed and that there is no single preferred instrument. There is also no significant agreement as to which coping strategies are the most effective in mediating stress (Monroe & Kelley, 1995). Lazarus (1993) concludes that problem- and emotion-focused coping mechanisms are both useful under the appropriate circumstances in facilitating adjustment to stressors.

Folkman and Lazarus's (1980) Ways of Coping Checklist is a frequently utilised measure of coping, with large numbers of researchers having used it in a trait-centred way, by altering the wording of the coping measure by asking how the person **usually**

copes rather than how that person copes with specific threats or encounters (Eagle, 1987; Lazarus, 1993). By changing the wording in this way, the process measure of coping is converted into a style measure, on the assumption that the coping pattern reported as "usual" actually took place some of the time. It is argued that this conceptualisation of coping is particularly useful as it avoids the possibility of confounding coping with outcome, by focusing on efforts to manage the stress whether or not they are successful (Aldwin & Revenson, 1987).

The present study examined the interactions between extraversion, neuroticism, coping and burnout. Coping was treated as a source of individual difference, and was discussed within the general framework offered by the transactional model of stress.

2.4 PERSONALITY, COPING AND BURNOUT

As mentioned above, although research documents the association between factors in the work environment and burnout (e.g. Sutherland & Cooper, 1990) much of this research overlooks the potentially mediating and moderating effects of individual difference variables, and their influence on resilience and vulnerability (Amirkhan et al, 1995; Black, 1991; Furnham, 1992). It has been noted above that stress emerges from the perceptual interface between environment and person, the product of which is related to subsequent vulnerability to disorder. The pivotal position of perception in stress theory highlights the significance of individual differences in stress responses and outcomes. Why can two people, when confronted with very similar types of life events, differ dramatically in their emotional responses and adaptations? (Monroe & Kelley, 1995).

While there seems to be agreement about the dependent variable that is considered, there seems to be little theoretical consensus as to what type of independent individual variable to consider (Cooper & Payne, 1991). The reviewed personality traits include Type A behaviour pattern, hardiness, locus of control, self-esteem and extraversion and

neuroticism (e.g. Hart et al, 1995; Koroktov & Hannah, 1994; Schmitz, 1992)[2]. Associations between demographic variables and personality variables have led to the inclusion of demographic and coping variables in various studies (e.g. Furnham, 1992; Jenkins, 1991; Manlove, 1993). Each variable has a large body of accumulated evidence regarding its stress effects, particularly Type A behaviour, which has been linked with coronary heart disease (Sutherland & Cooper, 1990).

Pertinent to the present study are extraversion, neuroticism and coping; demographic variables are also considered. These are discussed briefly below.

2.4.1 PERSONALITY

2.4.1.1   Extraversion-Introversion

Matthews (1992) states that "one of the most salient aspects of individual differences in personality is the person's level of introversion or extraversion" (p.95). Indeed, being among the "Big Five" or most reliable of personality factors (Digman, 1990, in Amirkhan et al, 1995), extraversion (and neuroticism) demonstrate the cross-temporal and cross-situational stability required of good predictors (p.201). Furthermore, on the basis of face validity, these dimensions appear logically linked with self-esteem and help-seeking. Extraversion has been described in such terms as sociable (as opposed to retiring), affectionate (versus reserved), and assertive (versus passive) - with sociability, in particular, capturing the essence of the disposition. They are generally more able to deal with stressful situations, tend to seek stimulation and are relatively impulsive, with decreased persistence. Extraversion has been found to be steadily associated with emotional well-being (Amirkhan et al, 1995).

Extraverts have been found to seek help much sooner than introverts, suggesting that deeply rooted personal predilections, involving approach or avoidance tendencies, may

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[2]   There are also contradictory results regarding interrelationships among stress-related individual differences (see Schaubroek & Ganster, 1991, for a review).

represent the true dynamic (Lu, 1995). Warmth, positive emotionality, and assertiveness (but not gregariousness, activity or excitement) were found to characterise the extravert who sought help (ibid).

Extraversion-introversion (and neuroticism) are most frequently measured using self-reports such as the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975; see `Methodology' below). Eysenck and Eysenck (1975) describe personality in terms of type, which is defined as a group of correlated traits. These are described as groups of correlated behavioural tendencies such as sociability, impulsiveness, assertiveness and vivacity.

Introverted people are typically oriented towards their own emotions, subjective perceptions and experiences and typically appear quieter, shy, more withdrawn and unsociable than more extraverted people (ibid). Introverts would tend to seek low-stimulus environments and tend to be more persistent (Furnham, 1992).

2.4.1.2   Neuroticism

A measure of emotionality, neuroticism is contrasted with `emotional stability'. High scorers on the neuroticism scale would typically be anxious, overly reactive, easily disrupted emotionally, prone to stress and often irrational and rigid in their responses. Neuroticism is also associated with increased somatic complaints and poorer personal adjustment (Eysenck & Eysenck, 1975; Furnham, 1992). Neuroticism has been said to comprise such tendencies as feeling uncomfortable around others, being sensitive to ridicule, and having general feelings of inferiority, as well as being mistrustful of others (Furnham, 1992).

Interestingly, Furnham (1981, in Sutherland & Cooper, 1990) found that high neuroticism scorers tend to avoid stimulating and active situations more than stable individuals, and that in intimate, interpersonal situations, attempts are made to reduce the level of intimacy by gaze avoidance. Although shyness is associated with anxious behaviour, Eysenck and Eysenck (1969) postulated that the neurotic person may desire

the company of others but is also fearful of it because of worries of inadequacy. In the work environment, neurotics and neurotic introverts are the most susceptible to stressful situations (Sutherland & Cooper, 1990). Further, high emotionality is likely to affect performance, but can both hinder or facilitate performance (Sutherland & Cooper, 1990)

2.4.1.3   Psychoticism ("tough-mindedness")

The high scorer on this scale can be described as a loner who does not care much for people. She or he may be "troublesome, not fitting in anywhere, and/or cruel, lacking in feeling and empathy, and altogether insensitive" (Eysenck & Eysenck, 1975, p.11). Such a person may be drawn to the unusual, indifferent to danger, and may enjoy upsetting or embarrassing others (ibid).

2.4.2 COPING

Research by McCrae and Costa (1986) led these authors to conclude that "it would appear that the most pervasive and replicable factors in coping are closely related to the major personality dimensions of neuroticism and extraversion" (p.394). Appraisals of stressful events are thought to arise from an evaluation of resources available to cope with events (discussed above).

Extraversion has been found to be positively related to social support seeking, self-esteem, optimism, and active, direct problem-solving styles. It was found to be negatively related to pessimism, passive coping, avoidance and blame (Amirkhan et al, 1995; Lu, 1995). These researchers found that warmth, positive emotionality and assertiveness (but not gregariousness, activity or excitement-seeking) were found to characterise the extravert who sought help. It seems that extraverts not only have a strong tendency to actively seek support, but also have a stronger sense of internal control and greater access to social resources. Introverts tend to adopt emotion-focused strategies, which aim at dealing with the inner, subjective and emotional stress experience. The extravert would be expected to direct his or her efforts at modifying the

environment, while the introvert would be expected to deal more with modification of the self (Lu, 1995).

Those scoring high on neuroticism were found to use less effective coping techniques; indeed, those techniques found to be most frequently used (e.g. self-blame and wishful thinking), have been associated with higher levels of burnout (e.g. McCrae & Costa, 1986).

2.4.3 DEMOGRAPHIC VARIABLES

Jenkins (1991) states that demographic variations in stress rates and stress outcomes are important for epidemiological and practical reasons. Social support, gender, age, marital status, employment status, rural/urban differences and social class are some of the demographic variables that have been studied in relation to occupational stress and burnout (see Jenkins, 1991, for a review of the literature). Jung (1995) examined ethnic group and gender differences in personality and coping, and found that European Americans showed less avoidance coping behaviour than Latino or Asian Americans; personality and gender differences were also found. Cordes and Dougherty (1993) report that although there is mixed evidence regarding the pattern and complexity of relationships, younger individuals consistently report higher levels of burnout as measured by the MBI. They only found one study that reported longer experience correlating with lower levels of emotional exhaustion and depersonalisation (Anderson & Iwanicki, 1984, in Cordes & Dougherty, 1993).

Jenkins (1991) argues that consideration of the demographics of stress is a complex issue as these are "gross structural variables, and it is the particular quality of the experiences...which is significant in the medium through which environmental stress and support are encountered" (p.125). Demographic factors are dealt with in more detail within the context of child care work below.

It is consistent with the theory reviewed above to expect that the coping strategies selected by the subjects will be, partially at least, a function of personality. This

relationship, and its association with burnout, will be examined in terms of a set of demographic variables, personality (extraversion, neuroticism, and psychoticism) and a range of coping subscales, the most prominent being emotion- and problem-focused strategies.

2.5 CHILD CARE WORK

2.5.1 REASONS FOR SELECTING CHILD CARE WORKERS AS SUBJECTS

The literature on occupational stress and individual differences has seldom been employed in relation to child care work, although child care workers represent a growing occupational group particularly vulnerable to burnout (Anglin, 1993; Curbow, 1990; Manlove, 1994; Savicki, 1993). The limited research that has been conducted in this area demonstrates significant relationships between stress and individual influences such as demographic variables, neuroticism, extraversion and coping (Koeske et al, 1993; Manlove 1993; Savicki, 1993).

2.5.2 THE NATURE OF CHILD CARE WORK

Pearce (1990) notes that child care work is a complex and essential approach to caring for children which can be differentiated from other allied human service disciplines. It requires a high level of personal and professional development on the part of the worker.

> If it is not done well the child carries the cost. If it is done well the child
> care worker carries the cost. It is a profession with a high emotional cost
> that demands emotional involvement.

(Pearce, 1990, p.29).

Child care work involves a systemic approach to the growth and development of children within the context of families, communities and organisations. This includes

direct service (including individual and group counselling; assessment; general child management and care; and organisational activities (including case management; report-writing; court appearances; programme and policy development; participation in professional teams; staff training and development). These responsibilities remain grounded in the direct day-to-day care of the children (Deery-Schmitt & Todd, 1995).

A thirty to fifty percent staff turnover per year is reported in the United States (Manlove, 1994) and in South Africa (Pearce, 1990). This implies a 100% staff turnover every three years. This percentage is reported to be increasing annually in both countries, and is related primarily to the high burnout, low salaries and low social prestige of child care work relative to other occupations (Savicki, 1993). Using an exit survey to discover reasons for leaving, Fleisher (1985, in Savicki, 1993), reported responses relating to intense workload, lack of clear performance feedback, and lack of support from supervisors.

Although Pearce's study (1990) indicates a growing improvement in the educational standards of child care workers in children's homes affiliated with South Africa's National Association of child care workers (NACCW), a lack of a good basic education remains a problem in child care work in South Africa today. The profession is further hampered by a lack of financial support and it experiences low involvement from the state.

2.5.3 RELATED RESEARCH

2.5.3.1   Demographic factors

Variables such as age, marital status and the presence of the provider's own children have been found to be related to stress outcomes. However, the direction of these findings is contradictory. For example, some research indicates that child care workers who are older, married and have children of their own report lower levels of burnout (Manlove, 1994). Deery-Schmitt and Todd (1995) found that the opposite pattern applied.

Manlove (1994) found that work hours, educational level, and wages were important only in predicting personal accomplishment. Although similar total amounts of variance were predicted for each of the three facets of burnout, there were important differences in which variables showed the strongest association with each facet of burnout. For example, younger, single individuals may be more prone to experiencing emotional exhaustion. Studies of the relationship between training and burnout are limited but do suggest that those in child care who have higher levels of education are more satisfied with their jobs (ibid).

Higher levels of social support were associated with significantly lower levels of both emotional exhaustion and depersonalisation (Manlove, 1994). Although interactions between variables can occur for any number of reasons, this finding suggests that social support may buffer the impact of work role conflict and ambiguity on emotional exhaustion and depersonalisation. Social support did not relate significantly with personal accomplishment.

Information on the relationship between experience and burnout is limited (Curbow, 1990). Some research has found that those who had been in the field for longer were more likely

to report higher levels of burnout (Townley, Thornburg & Crompton, 1991, in Curbow, 1990). Others have found an inconsistent relationship between burnout and experience (Kyriacou, 1987 in Curbow, 1990). Manlove (1993) found that those with more work experience reported significantly higher levels of personal accomplishment.

Age, experience and job satisfaction tend to be correlated with themselves. Some researchers have found a positive, linear relationship between them, and others have found a U-shaped curve in which satisfaction is higher at the beginning and the end of ones career. Within child care, age and experience both seem to serve moderating roles in the path to turnover (Manlove, 1993).

There appear to be two periods when providers are more likely to leave: during the first year, and approximately 3 to 4 years later, when the provider's own children begin school (Nelson, 1990, in Anglin, 1993). Beyond this, the risk of turnover decreases dramatically. Over time, perceived stress may decrease as caregivers develop a repertoire of coping skills; and when their own children leave, one potential source of stress is eliminated. Alternatively, it may be that only providers who seldom experience stress remain for longer periods.

Interestingly, Anglin (1993) calls for further understanding of the stages of staff development, such as helpless confusion, feeling competent, survival postures in the first year of practice, role certainty and the development of skills in the second year of practice, further career development in the third year of practice, and the provision of effective staff supervision.

Given the contradictory findings of previous research, these factors deserve more attention. Curbow (1990) speculates that perhaps the importance of these biographical characteristics lies in their roles as moderators of the association between other factors and burnout.

2.5.3.2 Personality factors

Higher scores on measures of learned helplessness, an external locus of control, and lower self-esteem have been associated with higher levels of burnout in child care workers (Deery-Schmidt & Todd, 1995; Manlove, 1994; Fuqua & Couture, 1986, in Savicki, 1993; McMullen & Krantz, 1988, in Savicki, 1993). In each of these studies, personality factors were related to specific subcategories of burnout as measured by the MBI. Self-esteem and learned helplessness were related to emotional exhaustion and depersonalisation; external locus of control was related to lowered personal accomplishment (Savicki, 1993). Subjects were found to view themselves as helpless and as having no control over situations, and either gave up or withdrew; or the problems built and burnout resulted (Savicki, 1993).

Manlove (1994) notes that neuroticism and extraversion in child care workers has been largely unexplored. Manlove (1993) found that higher levels of neuroticism (within the normal range) was positively correlated with higher levels of burnout as measured by all three facets of the MBI. Extraversion was unrelated to all independent and dependent variables in the model. Neuroticism accounted for almost 50% of variance in the three facets of burnout, particularly emotional exhaustion and depersonalisation. Child care work involves constant interactions, often revolving around issues with emotional and social content. Those who are highly reactive in emotional encounters are apt to find themselves frequently, if not constantly, emotionally stressed. High neuroticism scorers tend to be over-emotional in situations and had trouble returning to normal following emotional events. As a result they are particularly prone to burnout (ibid).

The strong relationship between neuroticism, emotional exhaustion and depersonalisation is in line with previous work linking neuroticism with coping styles and well-being (Furnham, 1992; McCrae & Costa, 1986). The greatest concern for child development outcomes is that those who are more emotionally exhausted or experience a greater sense of depersonalisation will be less responsive in the care they provide to children (Manlove, 1993).

Deery-Schmidt and Todd (1995) note that no studies of coping were identified in the child care literature. In contrast, many potential resources have been identified, including age, experience, education, personality, support and income (ibid).

2.5.3.3   Environment

Eldridge, Blostein and Richardson (in Savicki, 1993) concluded that burnout in child care workers was related to "the administration and its style of management: the structure of the organisation rather than the substance of (child care) work" (p.318). Also environmentally focused, Kingsley and Cook-Hatala (in Savicki, 1993) and Manlove (1993) found child care occupational stress related to staff relations, work role ambiguity, role conflict and work overload.

Further, Savicki (1993) reports that burnout is also fostered by the fact that the child care worker is not seen very favourably in the eyes of society as a whole. Societal influences have also resulted in economic pressures which have meant that fewer funds are being allocated to the social services, causing many workers to lose their jobs or to fear threats to their job security. Within the South African context too, child care workers are generally regarded as "among the lowest status persons organisationally, economically, educationally and socially" (Pearce, 1990, p.54).

2.6 SUMMARY

Nearly everyone experiences stress at work, but are some individuals more prone than others to `burn out'? There is a modest but important relationship between personality and occupational performance regarding motivation, choice, productivity and satisfaction (Furnham, 1992). Is there an equally important relationship between personality, coping and burnout? Research investigating well-being (in terms of positive and negative affectivity) suggests that there is. Indeed, there seems to be a shift in recent literature from a focus on organisational variables in the burnout process to an inclusion of individual difference, particularly personality, variables. It is suggested that a differential vulnerability in terms of personality and coping variables operates, mainly through the appraisal and reappraisal of stressors.

The present study placed a descriptive measure of burnout (the MBI) within the fabric of personality (measured by the EPQ), and applied it to child care work, thereby exploring an important and relatively neglected facet of burnout. Child care work is a relatively under-studied population but one that seems to be struggling with spiralling burnout and turnover, within a context of increasing demand for services and a need for continuity of care. This situation highlights important questions regarding the emotional endurance and professional competence of child care workers. Further, research in the area has the potential to feed into issues such as child care worker training and support, policy development and the development of theoretical knowledge in the area.

Research on occupational stress and burnout is notoriously complicated by the lack of conceptual and operational clarity in the area. The most commonly adhered to model seems to be a transactional one, which accounts for interactions and feedback possibilities between all variables and at all levels. Although it would be extremely difficult to operationalise this system holistically in research, it is a comprehensive and useful model in understanding the complex and dynamic nature of occupational stress.

CHAPTER THREE

METHODOLOGY

3.1 HYPOTHESES

It was hypothesised that burnout (as measured by scores on emotional exhaustion, depersonalisation and diminished personal accomplishment) would be associated with personality (neuroticism and extraversion), coping (emotion-focused and problem-focused coping) and demographic characteristics (such as age and experience). Specifically, the following outcomes were anticipated:

(a)   Emotion-focused coping would be the most frequently used coping strategy within a population at high risk for burnout;

(c)   Extraversion would be associated with problem-focused coping.

(d)   Higher scores on neuroticism would be associated with emotion-focused coping.

(e)   Burnout and coping would be significantly associated with demographic variables such as age, experience (number of years spent as a child care worker), the number of children the child care workers themselves had, marital status etc.

3.2 CHARACTERISTICS OF THE SAMPLE

The subjects were a sample of 70 full-time child care workers from seven children's homes in the Pietermaritzburg and Durban areas. Only six of the subjects were male. The homes were drawn randomly from an index of twenty-five children's homes in KwaZulu-Natal which was provided by Pietermaritzburg Child Welfare. This type of

sampling implies that generalisations must be made with caution, and that these may vary in terms of their validity, depending upon the heterogeneity of the population (Kerlinger, 1986).

Additional demographic information can be found in Chapter Four (Tables 1-3).

3.3 PROCEDURE

Permission to conduct the research was requested in writing. These letters were followed up with telephone calls to the principal of each home, clarifying any questions that they had and arranging for the data to be collected.

It was originally hoped that the researcher would give the questionnaires to the child care workers in groups to complete, in order to ensure standardised, and supervised, assessment conditions, and to further ensure a high response rate. Six principals felt that the child care workers should complete the questionnaires in their own time. The researcher therefore asked the social worker in charge of each home to give the questionnaires to willing participants, and to return them, within a month, in stamped and self-addressed envelopes.

Altogether, 95 child care workers said that they would be willing to participate in the study. Follow-up telephone calls were made to those homes who did not return the questionnaires by the specified date. A total of 70 questionnaires (74% response rate) was returned. Reasons for non-responses included staff leaving the homes during the research period, questionnaires remaining unreturned, or questionnaires being too incomplete to include in the study. This may have been due partly to the fact that the items were written in English only.

To ensure as uniform an assessment as possible, a protocol (cf. Appendix A) was attached to each set of questionnaires. This included a brief outline of the nature of the study, specific instructions for the completion and handing in of the questionnaire, and assurances of confidentiality. Subjects were asked to complete the questionnaire in one sitting, on their own, and where they were unlikely to be interrupted. They were

informed that their names were not required. This allowed them to be more honest and uninhibited in answering the questionnaires, thus avoiding the problem of socially desirable responses. Each subject was provided with a brown envelope in which to seal their completed questionnaire, thus further protecting their confidentiality.

To increase subjects' motivation for participating in the study, participants were offered summaries of the research results, and a workshop on stress management, following completion of the research.

3.4 PSYCHOMETRIC INSTRUMENTS

The following psychometric instruments were used in the study, copies of which are included in Appendices B, C and D[3].

(a)   General Information Questionnaire (compiled by the present author);

(b)   The Maslach Burnout Inventory (Maslach & Jackson, 1981);

(c)   The Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975);

(d)   Ways of Coping Checklist (Folkman & Lazarus, 1980; revised by Eagle, 1987).

3.4.1 DEMOGRAPHICS QUESTIONNAIRE (CF. APPENDIX B)

The literature review above indicated that demographic characteristics such as age and marital status have been linked with burnout, particularly in child care workers (e.g. Savicki, 1993), and with personality differences, stress and burnout (e.g. Furnham, 1992).

The Demographics Questionnaire comprised items pertaining to the respondent's gender, home language, age, marital status, children, type of accommodation, how many children they work with per day, number of weeks' leave taken, job satisfaction

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[3]   Please note that the MBI and the EPQ are not included in the Appendix due to the copyrights.

and length of time spent as a child care worker. A significant omission from this questionnaire was subjects' highest level of education attained and salary.

3.4.2 MASLACH BURNOUT INVENTORY (MBI; MASLACH & JACKSON, 1981)

The burnout construct has been widely applied in both child care worker populations (e.g. Manlove, 1993) and in investigations around personality and occupational stress (e.g. Basson & van der Merwe, 1994; Savicki, 1993). The MBI is a 22-item scale and is currently one of the best known and most widely used measures of burnout (Manlove, 1994). The MBI has been the assessment instrument of choice in many of these studies, with characteristics such as depersonalisation being highlighted in child care worker populations specifically (e.g. Manlove, 1994). Developed by Maslach and Jackson (1981), this 22-item inventory consists of three subscales designed to capture the salient aspects of burnout. The subscales consisted of the following:

(a)   *Emotional exhaustion* **(EE)** (emotional overextension and feelings of being worn down by one's job).

(b)   *Depersonalisation* **(DP)** (emotional detachment and negative, possibly callous feelings to one's recipients).

(c)   *Personal accomplishment* **(PA)** (a tendency to evaluate oneself negatively, particularly in terms of competence and success).

Subjects were asked to read each statement and rate how often they felt that way about their job on a scale from (0) never to (6) every day. The frequency that the respondent experienced feelings related to each subscale was assessed using separate six-point response formats. The reported high correlations between the frequency and intensity scores of the subscales of the MBI permitted the use of a single score comprising the combined frequency and intensity score on each subscale (Maslach & Jackson, 1986). Burnout was assumed to be a continuous variable, classifiable as high, average or low depending upon whether the scores fall in the upper third, middle third or lower third of the normative distribution of scores. A high degree of burnout involved high scores for the EE and DP subscales, and low scores for the PA subscale. A low degree of

burnout is indicated by the opposite pattern.

Maslach and Jackson (1981) report Cronbach alpha for the internal consistency of the three subscales at .90 (EE), .79 (DP) and .71 (PA). These coefficients are based on a normative sample of 2 897 teachers, lecturers, social service workers, medical workers and mental health workers.

There is considerable support for the construct validity of the MBI (Rafferty, Lemkau, Purdy & Rudisill, 1986, in Manlove, 1993). Evidence of discriminant validity is less clear cut. Meier (1984, in Manlove, 1994) found high correlations between burnout and depression and has suggested that the MBI is measuring a broader construct of well-being. There has also been some debate in the literature as to whether the MBI measures parallel forms of burnout, or varying stages of the process (ibid). Test-retest reliabilities for the MBI ranged from .54 to .82 for two samples of subjects (Maslach & Jackson, 1986). Internal consistency as measured by Cronbach's alpha ranged from .52 to .83 for this sample.

3.4.3 EYSENCK PERSONALITY QUESTIONNAIRE (EPQ) (EYSENCK & EYSENCK, 1975)

This is a well-established measure with extensive normative data for a variety of populations, including nurses and social workers (Eysenck & Eysenck, 1985). Numerous studies have confirmed extraversion and neuroticism as independent factors as measured by the EPQ and other instruments (see Eysenck & Eysenck, 1985). Reliability of the measure ranged from .80 to .97 for test-retest and .75 to .80 for alternate forms (Eysenck & Eysenck, 1975). Internal consistency, as measured by Cronbach's alpha, was .8 for neuroticism and .67 for extraversion in this sample.

The significance of personality variables, specifically introversion-extraversion and levels of emotional stability-instability (neuroticism), in the stress and burnout process has been discussed in the literature review. According to Eysenck and Eysenck (1975), behaviour is determined by dispositional (personality) differences in interaction with the

environment. This interaction is argued to give rise to "descriptive, phenotypic differences in extraversion-introversion, which can best be measured in terms of questionnaires such as the EPQ" (Eysenck & Eysenck, 1975, p.10).

The EPQ evolved from the Maudsley Medical Questionnaire and the Maudsley Personality Inventory, to include a lie scale (L) and a psychoticism scale (P), in addition to independent measures of extraversion (E) and neuroticism (N) (Eysenck & Eysenck, 1975); (discussed above). The psychiatric nature of these terms does not imply that the test cannot be used in the measurement of personality traits in non-psychiatric populations. Eysenck and Eysenck (1975) emphasise that the terms "simply refer to underlying personality traits present in varying degrees in all persons; if present in a marked degree, they predispose a person to the development of psychiatric abnormalities" (p.8). Hence neuroticism is referred to as "emotionality", and psychoticism as "tough-mindedness" (Eysenck & Eysenck, 1975).

The lie scale assesses subjects' inclination to "fake good": this may point to conscious misrepresentation by the subject, but it may also be indicative of a stable personality factor, or social naivete. On the basis of a number factorial and experimental studies, Eysenck and Eysenck (1975) conclude that the scale has a large degree of factorial unity. The authors do not offer a cut-off point for high L scorers as they vary across age and population. In this study the researcher correlated subjects' L scores with all other variables (no significant correlations were found).

The test-retest and consistency reliabilities of the EPQ have been established by the authors using 257 male and female dental students, polytechnic students, social workers and university students, and over 2000 normals and prisoners. Reliabilities were established at around .80 and .90, and the authors conclude that "for higher-order factors of personality, these reliabilities are adequate, and not inferior to those observed for other tests measuring similar factors" (Eysenck & Eysenck, 1975, p.17).

3.4.4 WAYS OF COPING CHECKLIST (WCC) (FOLKMAN & LAZARUS, 1980; EAGLE, 1987) (CF. APPENDIX C)

Koeske et al (1993) note that the measurement of coping strategies is not highly developed, and there is no single preferred instrument. The WCC is a self-report measure consisting of a checklist of 60 items pertaining to a wide range of cognitive and behavioural coping strategies that a person may use to deal with specific stressful events or experiences.

This study adopted Eagle's (1987) approach of emphasising coping as a relatively stable and consistent (trait-like) style. This meant that subjects were required to refer to strategies which they usually, or most often, use to deal with a wide range of stressful experiences. Originally, these were conceptualised in terms of problem-focused strategies (aimed at modifying the source of stress), and emotion-focused strategies (aimed at managing the emotional distress accompanying the problem).

Vingerhoets and Flöhr (1984) adapted the WCC to assess more discrete coping strategies by including a number of subscales, to which Eagle (1987) added a 4-item scale concerned only with help-seeking. Eagle's reliabilities were as follows: 0.784 (WT); 0.647 (A); 0.392 (PF); 0.603 (EW); 0.590 (SB); 0.680 (G), and 0.698 (HS). The use of these scales resulted in the slightly shortened version of the test that was used in the present study. The subscales are outlined briefly below:

(a)   *Wishful thinking/escape* (15 items): This category refers to emotion-focused coping strategies (e.g. humour, wishful thinking and denial).

(b)   *Acceptance* (12 items): This category refers to emotion-focused strategies which indicate acceptance of the stress once it has emerged (e.g. compromise and substitutive activity).

(c)   ***Problem-focused/help-seeking*** (14 items): This category refers to problem-focused efforts (e.g. finding alternative solutions, and decisive behavioural planning).

(d)   ***Emotional withholding*** (10 items): This category refers to emotion-focused strategies that seek to control anxiety by inhibiting emotional discomfort (e.g. an unwillingness to look for or accept emotional support from others, or to express feelings of vulnerability or dependence).

(e)   ***Self-blame*** (9 items): This category refers to emotion-focused strategies (e.g. wishing that one could be a more assertive or strong person).

(f)   ***Growth*** (7 items): This category refers to emotion-focused strategies that attempt to buffer the impact of stress by controlling the meaning of the problem, thus recognising the creative potential presented by stressful situations.

(g)   ***Help-seeking*** (4 items): This category refers to problem-focused strategies where efforts are directed towards others to obtain information and guidance.

To avoid limiting the magnitude of the relationship between coping responses and other measures, Eagle (1987) replaced the binary yes/no answer format with a five-point Likert scale ranging from (1) never to (5) always, indicating the frequency with which a strategy is used. The scores for each subscale are obtained by dividing the total score for each by the number of items in that scale.

CHAPTER FOUR

RESULTS

4.1   INTRODUCTION

A summary of the analysis of the collected data is presented in this chapter. Analysis was completed using the Statistical Package for the Social Sciences (SPSS) and the Number Cruncher for the Social Sciences (NCSS). The chapter begins with a presentation of the demographic characteristics of the sample. This is followed by an analysis of the significant relationships as they pertain to the research hypotheses. All raw data and result print-outs are available from the author on request.

4.2   DEMOGRAPHIC INFORMATION

In total, 70 subjects took part in the study. Subjects were child-care workers from seven children's homes in the KwaZulu-Natal region.

The overall mean, median and modal ages of the subjects fell in the 34-41 year old age range (see Table 1), with the majority (81%) living in the children's homes themselves. Six of the subjects were male. Over half (58%) of the subjects reported English to be their home language, 21% were Afrikaans and 21% were Zulu- or Xhosa-speaking. Just under half (45%) of the sample was married, 42% were single and 13.5% were divorced or widowed.

Tables 1, 2 and 3 below reflect the age range, ethnic composition and the number of years spent in child care work of the sample respectively.

Table 1. **Age range of the sample**

AGE RANGE	FREQUENCY (N=66)	PERCENTAGE
18-25	7	10.6
26-33	20	30.3
34-41	19	28.8
42-49	9	13.6
50-57	8	12.1
58-65	3	0.04

Table 2. **Ethnic composition of the sample**

ETHNIC IDENTITY	FREQUENCY (N=70)	PERCENTAGE
BLACK	14	20.9
WHITE	33	49.3
'COLOURED'	10	14.3
INDIAN	13	18.6

Table 3. **Duration of child care work**

DURATION (YEARS)	FREQUENCY (N=70)	PERCENTAGE
0-1	26	38.2
1-5	24	35.3
5-10	15	22.1
>10	5	4.4

Children's home membership was not found to be a significant source of variance in terms of stress and burnout; neither did it correlate significantly with any of the other variables (p>0.05). The subject sample was therefore treated as one group, verifying the assumption that environmental sources of stress
were perceived more or less consistently across the population.

4.3 DESCRIPTIVE STATISTICS

Table 4 below summarises the percentage of subjects in high, moderate and low burnout divisions, calculated according to Maslach and Jackson's (1986) cutoff criteria. Over half (51%) of the subjects reported low burnout in terms of a diminished sense of personal accomplishment. Just under half (45.7%) reported low degrees of emotional exhaustion. Approximately a third of the subjects reported moderate to low levels of burnout in all three domains. Only 17% of subjects reported high depersonalisation.

Table 4. **Percentage of child care workers with high, moderate and low burnout on each MBI scale.**

DEGREE BURNOUT	EE (N=70)	DP (N=70)	PA (N=70)
HIGH	24.2%	17%	51%
MODERATE	28.6%	31%	26%
LOW	45.7%	26%	26%

EE = Emotional exhaustion
DP = Depersonalisation
PA = Personal accomplishment

A single-mean t-test comparison of means was carried out for some of these differences. When compared against Maslach's (1981) norms for social workers, mean scores on depersonalisation were similar (p>0.05). The present sample's mean scores on emotional exhaustion were significantly lower than Maslach's norms for social workers however, indicating less emotional exhaustion in the present sample (t(69) = -4.13; p<0.0005). Mean scores on personal accomplishment were slightly higher relative to Maslach's social worker norms, indicating a lower sense of personal accomplishment in the present, child care worker, sample (t(69) = -4.26; p<0.0005).

Table 5. **Maslach Burnout Inventory Scores: t-Test comparison of means: Maslach's (1981) norms for social workers, and the present study's sample of child care workers**

IV	MEAN: CHILD CARE WORKERS (PRESENT STUDY) N=70	SD. (PRESENT STUDY)	MEAN: MBI SOCIAL WORKERS N=60	SIGNIF.
EE	17.26	9.98	22.19	p<0.0005
DP	7.81	5.79	7.12	NS
PA	31.6	9.68	36.53	p<0.0005

IV	= Independent variable	DP	= Depersonalisation
PA	= Personal accomplishment	EE	= Emotional exhaustion
NS	= Not significant	SD.	= Standard deviation

The present sample's mean scores for child care workers (a sample with only six male subjects) compared closely to Eysenck's (1947) norms for women between the ages of 30 and 39. Although differences for other norms (nurses and welfare officers) were greater, particularly for the P and L scales (p<0.0005), these were still within the standard deviation. See Table 5.

Table 6. Eysenck Personality Questionnaire Scores: Eysenck's (1947) norms for women between the ages of 30 and 39, and the present study's sample of child care workers

IV	MEAN: CHILD CARE WORKERS (PRESENT STUDY) N=70	SD. (PRESENT STUDY)	EYSENCK'S (1947) NORMS: WOMEN 30-39 YRS N=544	SIGNIFICANCE
E	12.8	5.38	11.97	NS
N	12.37	5.23	12.57	NS
P	3.02	1.74	2.28	p<0.0005
L	10.31	4.19	8.84	p<0.0005

IV	= Independent variable	SD.	= Standard Deviation
N	= Neuroticism	L	= Lie
E	= Extraversion	P	= Psychoticism
NS	= Not significant		

Table 7 illustrates a breakdown of the mean frequencies with which subjects use various strategies to cope with stress. An ANOVA indicated that the scores on the subscales were equivalent and were therefore directly comparable.[4] Emotional withholding was reported to be the most frequently used strategy, followed by wishful thinking, self-blame, acceptance, growth, help-seeking and problem-focused coping respectively (F(6;469)=18,96; p<0,00001).

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[4] Subjects' scores were calculated by adding their ratings on all items for each category, and obtaining a mean score for these.

Table 7. **Ways of Coping Checklist Scores[5]: the present study's sample of child care workers' means and standard deviations**

COPING STRATEGY	MEAN	SD.
WISHFUL THINKING/ ESCAPE	3.09	0.72
ACCEPTANCE	3.45	0.57
PROBLEM- FOCUSED/ HELP-SEEKING	3.82	0.61
EMOTIONAL WITHHOLDING	2.76	0.62
SELF-BLAME	3.19	0.65
GROWTH	3.46	0.66
HELP-SEEKING	3.62	0.87

SD. = Standard deviation

4.4 BETWEEN-GROUP DIFFERENCES

One-way ANOVAs for more than two groups, and t-tests (for two groups) were calculated in order to assess whether or not burnout and coping differed significantly in terms of demographic variables. Gender, marital status, cohabitants, whether or not subjects had children of their own, the number of children worked with, weeks' leave and membership of community organisations did not influence burnout or coping significantly, and are mentioned again only briefly, in the discussion of the results, below. Only two subjects answered the question on job satisfaction, and this factor was therefore excluded from the results. Significant results (one-way ANOVAs) are shown in Table 8.

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[5] Please note that norms for the original samples are unavailable.

Table 8. Significance on one-way ANOVAs: demographic factors, burnout (emotional exhaustion and depersonalisation) and ways of coping (problem-focused, emotional-withholding, self-blame and growth)

DV	AGE (SIGNIF. AND F- RATIO)	DURATION (SIGNIF. AND F- RATIO)	ETHNIC IDENTITY (SIGNIF. AND F-RATIO)
EE	p<0,0023 F=4.24	p<0,0001 F=11.66	NS
DP	p<0,0369 F=2.55	p<0,0002 F=7.69	NS
PF	NS	NS	p<0,0382 F=2.98
EW	NS	NS	NS
SB	NS	NS	p<0,0396 F=2.76
G	NS	NS	NS

DV	= Dependent variable	DURATION	= Duration (years) of child care work
NS	= Not significant	G	= Growth
EE	= Emotional exhaustion	DP	= Depersonalisation
EW	= Emotional withholding	WT	= Wishful thinking
PF	= Problem-focused	SB	= Self-blame

Subjects' age impacted on emotional exhaustion (p<0.0023; F=4.24) and depersonalisation (p<0.0369; F=2.55). Child care workers in the 18-25 year age range were the least emotionally exhausted; subjects in the 34-41 year age range reported the highest levels of emotional exhaustion. Subjects in the 42-49 year age range reported the lowest levels of depersonalisation; subjects in the 53-58, and 26-33, year age groups reported the most depersonalisation.

The length of time spent as a child care worker (in years) impacted on emotional

exhaustion (p<0.0001, F=11.66) and depersonalisation (p<0.0002, F=7.69). Those child care workers who had been in the profession for less than a year and longer than ten years reported the lowest degrees of emotional exhaustion. Subjects who had been in the field for between one and five years reported the highest levels of emotional exhaustion. Subjects who had been in the field for longer than ten years reported the most depersonalisation, and subjects who had been less than a year in the field reported the least depersonalisation.

Subjects' ethnic identity impacted on the reported frequency of problem-focused coping (p<0.0382, F=2.98) and self-blame (p<0.0392, F=2.76). 'Black' subjects were less likely to use self-blame as a coping technique. 'Coloured' and 'Indian' subjects reported using problem-focused coping slightly more frequently than did 'black' and 'white' subjects. The means for these significant variables may be seen in Tables 9-14, and are illustrated graphically in Figures 2-7.

Table 9.   Means for age and emotional exhaustion (EE)

AGE	18-25 N=7	26-33 N=20	34-41 N=19	42-49 N=9	50-57 N=8	58-65 N=3
MEAN	10.7	23.5	17.8	9.4	19.4	15.3

Figure 2.   Age and emotional exhaustion (EE)

MEAN EMOTIONAL EXHAUSTION
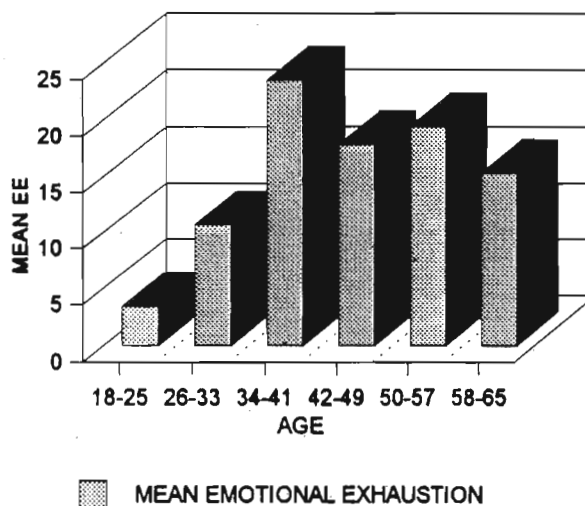
Table 10. **Means for age and depersonalisation (DP)**

AGE	18-25 N=7	26-33 N=20	34-41 N=19	42-49 N=9	50-57 N=8	58-65 N=3
MEAN	6.4	11.3	6.7	4.4	8.4	15.3

Figure 3. **Age and depersonalisation (DP)**

    MEAN DEPERSONALISATION
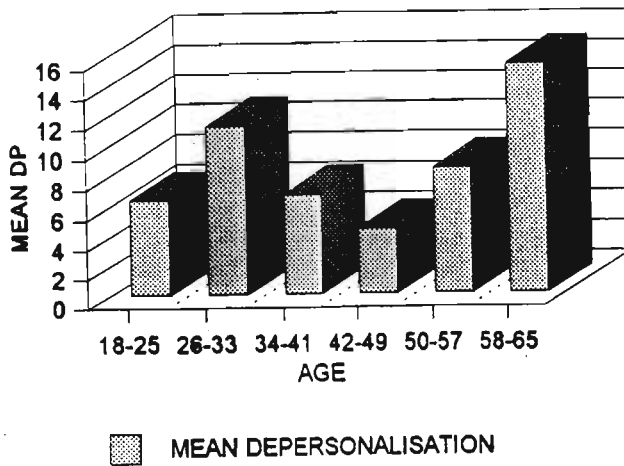
Table 11. **Means for duration (years) of child care work and emotional exhaustion (EE)**

YEARS	0-1 N=26	1-5 N=24	5-10 N=15	>10 N=3
MEAN	12.2	16.9	25.6	31.3

Figure 4. **Duration (years) of child care work and emotional exhaustion (EE)**

    MEAN EMOTIONAL EXHAUSTION
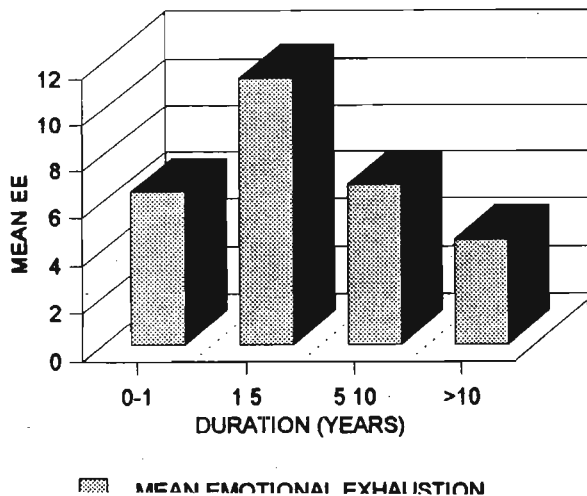
YEARS	0-1 N=26	1-5 N=24	5-10 N=15	>10 N=3
MEAN	5.5	7.0	11.8	16.3

Figure 5.   *Duration (years) of child care work and depersonalisation (DP)*

MEAN DEPERSONALISATION
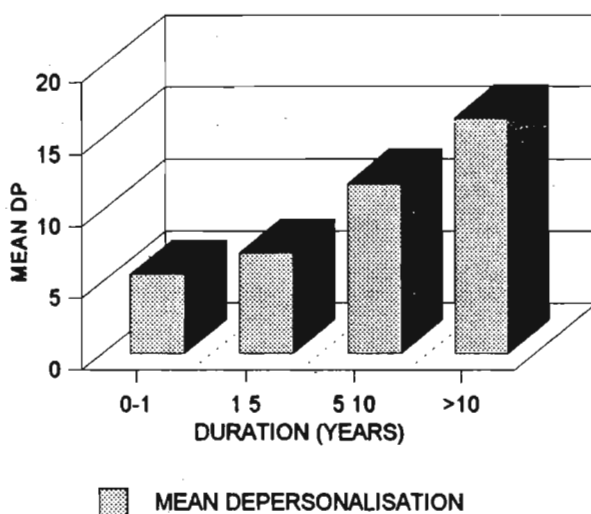
Table 13.   Means for ethnic identity and problem-focused coping (PF)

IDENTITY	'BLACK' N=14	'WHITE' N=33	'COLOURED N=9	'INDIAN' N=10
MEAN	3.5	3.8	4.0	4.1

Figure 6.   *Ethnic identity and problem-focused coping (PF)*

MEAN PROBLEM FOCUSED COPING
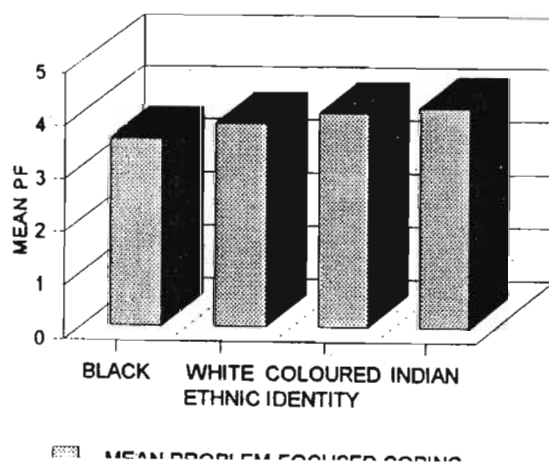
Table 14. Means for ethnic identity and self-blame (SB)

IDENTITY	'BLACK' N=14	'WHITE' N=33	'COLOURED N=9	'INDIAN' N=10
MEAN	2.8	3.4	3.3	3.0

Figure 7.   Ethnic identity and self-blame (SB)

MEAN SELF-BLAME
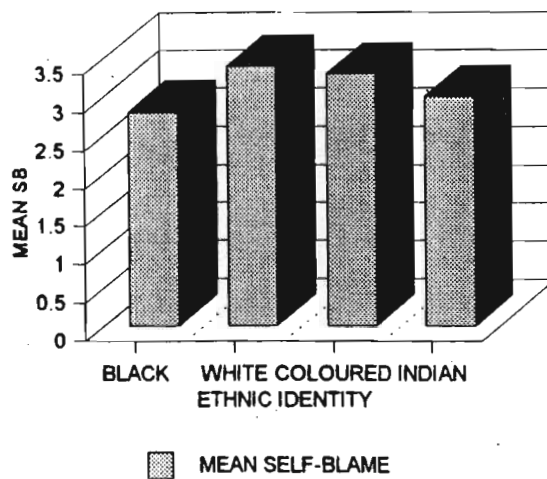
4.5   STEPWISE REGRESSION AND CORRELATIONAL ANALYSES

Stepwise regressions were used to investigate the extent to which personality (neuroticism and extraversion) and ways of coping were associated with three facets of burnout (emotional exhaustion, depersonalisation and personal accomplishment). Pearson product moment correlation coefficients (r) and their levels of significance were also calculated.

Extensive comment on these correlations is not practical at this point (see Chapter 5) since each is worthy of some interpretation. It is evident that variables within the stress system are complex and interrelated. Although correlational statistics do not indicate causality, it should be noted that relationships such as these are seldom linear anyway. Findings are presented in Tables 15 through 30.

Table 15. **Stepwise regression and correlational analyses: ways of coping (WCC) on emotional exhaustion (MBI)**

IV	t VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
WT	1,5	NS	0.028	0,35	p<0.005
A	0,5	NS	0.003	0,13	NS
PF	0,5	NS	0.004	0,14	NS
EW	1,2	NS	0.017	0,24	p<0.025
SB	3,4	p<0,05	0.150	0,38	p<0.05
G	0,9	NS	0.010	0,07	NS
HS	0,7	NS	0.007	0,10	NS

IV   = Independent variable

SIGNIF.(REGR) = Significance of regression

SIGNIF.(CORR) = Significance of correlation

WT	= Wishful thinking/escape	A	= Acceptance
PF	= Problem-focused	G	= Growth
SB	= Self-blame	EW	= Emotional withholding
HS	= Help-seeking	NS	= Not significant

Self-blame was the best predictor of emotional exhaustion, contributing a significant 15% of the variance in emotional exhaustion (R^2=0.150; p<0.05). Wishful thinking/escape (p<0.005; r=0.35), emotional withholding (p<0.025; r=0.24) and self-blame (p<0.05; r=0.38) correlated significantly with emotional exhaustion, but did not contribute significantly to the variance the emotional exhaustion scores.

Table 16. **Stepwise regression and correlational analyses: ways of coping (WCC) on depersonalisation (MBI)**

IV	t VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
WT	2.6	p<0.005	0.13	0,35	p<0.005
A	0.4	NS	NS	0,15	NS
PF	0.4	NS	NS	0,06	NS
EW	2.5	p<0.005	0.20	0,36	p<0.005
SB	1.1	NS	NS	0,33	p<0.005
G	0.2	NS	NS	0,13	NS
HS	0.1	NS	NS	-0,01	NS

IV   = Independent variable
SIGNIF.(REGR) = Significance of regression
SIGNIF.(CORR) = Significance of correlation

WT	= Wishful thinking/escape	A	= Acceptance
PF	= Problem-focused	G	= Growth
EW	= Emotional withholding	SB	= Self-blame
HS	= Help-seeking	NS	= Not significant

Wishful thinking (R^2=0.13; p<0.005) entered the equation as the best predictor to account for depersonalisation. The next variable to enter as a predictor was emotional withholding (R^2=0.20; p<0.005). Significant positive correlations were found between depersonalisation and wishful thinking/escape (p<0.005; r=0.35), emotional withholding (p<0.005; r=0.36) and self-blame (p<0.005; r=0.33). As the degree of depersonalisation increased so these coping strategies were reported to be more frequently used. Self-blame did not contribute significantly to the depersonalisation scores.

Table 17. **Stepwise regression and correlational analyses: ways of coping (WCC) on diminished personal accomplishment (MBI)**

IV	t VALUE	SIGNIF. (REGR)	R^2	r	p
WT	-2.9	p<0.005	0.14	- 0.25	p<0.05
A	0.5	NS	NS	0.10	NS
PF	2.1	p<0.005	0.06	0.26	p<0.025
EW	0.4	NS	NS	0.03	NS
SB	1.7	NS	NS	0.06	NS
G	0.1	NS	NS	0.12	NS
HS	1.2	NS	NS	0.17	NS

IV = Independent variable
SIGNIF.(REGR) = Significance of regression
SIGNIF.(CORR) = Significance of correlation

WT	= Wishful thinking/escape	A	= Acceptance
PF	= Problem-focused	G	= Growth
EW	= Emotional withholding	SB	= Self-blame
HS	= Help-seeking	NS	= Not significant

Problem-focused coping (R^2=0.06; p<0.005) was entered as the best predictor of personal accomplishment. Wishful thinking (R^2=0.14; p<0.005) was entered next, also contributing significantly to the variance in diminished personal accomplishment. Wishful thinking correlated negatively and significantly with low personal accomplishment (p<0.05; r=-0.25). Self-blame (p<0.010; r=0.06) and problem-focused coping (p<0.025; r=0.26) correlated significantly and positively with low levels of personal accomplishment.

Table 18. **Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on emotional exhaustion (MBI)**

IV	t. VALUE	SIGNIF. (REGR)	R^2	r	p
E	0.7	NS	0.007	-0.00	NS
N	4.3	p<0.001	0.219	0.47	p<0.001
P	1.1	NS	0.014	-0.05	NS
L	0.3	NS	0.001	-0.05	NS

IV   = Independent variable

SIGNIF.(REGR)   = Significance of regression

SIGNIF.(CORR)   = Significance of correlation

E   = Extraversion   N   = Neuroticism

P   = Psychoticism   L   = Lie

NS   = Not significant

Neuroticism (R^2=0.219; p<0.001) was the only significant predictor of emotional exhaustion, contributing almost 22% of the variance in this dimension. A significant and positive correlation was indicated between neuroticism and emotional exhaustion (p<0.001; r=0.47). High scorers on neuroticism had significantly greater levels of emotional exhaustion.

Table 19. **Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on depersonalisation (MBI)**

IV	t VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	0.8	NS	0.008	-0.15	NS
N	3.3	p<0.005	0.140	0.37	p<0.001
P	0.4	NS	0.002	0.10	NS
L	0.3	NS	0.001	-0.09	NS

IV	= Independent variable
SIGNIF.(REGR)	= Significance of regression
SIGNIF.(CORR)	= Significance of correlation

E	= Extraversion	N	= Neuroticism
P	= Psychoticism	L	= Lie
NS	= Not significant		

Neuroticism contributed significantly to depersonalisation (R^2=0.140; p<0.005) Neuroticism also correlated negatively and significantly with this dimension of burnout (p<0.001; r=0.37).

Table 20. Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on (low) personal accomplishment (MBI)

IV	t VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	2.8	p<0.05	0.240	0.3	p<0.01
N	-1.6	p<0.05	0.120	-0.28	p<0.025
P	-3.3	p<0.05	0.124	-0.35	p<0.005
L	0.6	NS	NS	0.00	NS

IV   = Independent variable

SIGNIF.(REGR)   = Significance of regression

SIGNIF.(CORR)   = Significance of correlation

E   = Extraversion   N   = Neuroticism

P   = Psychoticism   L   = Lie

NS = Not significant

Psychoticism (R^2=0.124; p<0.05) was entered as the best predictor of personal accomplishment, followed by extraversion (R^2=240; p<0.05) and neuroticism (R^2=0.120; p<0.05). Extraversion correlated significantly and positively with personal accomplishment (p<0.01; r=0.3). Neuroticism (p<0.025; r=-0.28) and psychoticism (p<0.005; r=-0.35) correlated significantly and negatively with personal accomplishment.

Table 21. **Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on wishful thinking (WCC)**

IV	t VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	0.4	NS	0.002	-0.14	NS
N	4.5	p<0.001	0.239	0.49	p<0.001
P	0.4	NS	0.002	0.02	NS
L	0.3	NS	0.001	-0.05	NS

IV	= Independent variable
SIGNIF.(REGR)	= Significance of regression
SIGNIF.(CORR)	= Significance of correlation

E	= Extraversion	N	= Neuroticism
P	= Psychoticism	L	= Lie
NS	= Not significant		

Neuroticism contributed significantly to wishful thinking (R^2=0.239; p<0.001), accounting for 23.9% of the variance. Extraversion correlated negatively and not significantly with wishful thinking. Neuroticism correlated positively and significantly with wishful thinking (p<0.001; r=0.49).

Table 22. Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on acceptance (WCC)

IV	t VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	1.0	NS	0.015	0.08	NS
N	1.7	p<0.010	0.044	0.21	p<0.05
P	1.1	NS	0.017	-0.10	NS
L	1.4	NS	0.029	0.13	NS

IV   = Independent variable
SIGNIF.(REGR)   = Significance of regression
SIGNIF.(CORR)   = Significance of correlation

E   = Extraversion   N   = Neuroticism
P   = Psychoticism   L   = Lie
NS   = Not significant

Neuroticism influenced acceptance significantly (R^2=0.044; p<0.010), accounting for 4.4% of the variance. A significant, positive correlation was found between them (p<0.05; r=0.21).

Table 23. **Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on problem-focused coping (WCC)**

IV	t VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	1.7	$p<0.05$	0.042	0.20	$p<0.05$
N	0.2	NS	0.000	-0.02	NS
P	1.0	NS	0.014	-0.09	NS
L	0.3	NS	0.002	-0.00	NS

IV   = Independent variable
SIGNIF.(REGR)   = Significance of regression
SIGNIF.(CORR)   = Significance of correlation

E   = Extraversion   N   = Neuroticism
P   = Psychoticism   L   = Lie
NS   = Not significant

Extraversion contributed significantly to problem-focused coping (R^2=0.042; $p<0.05$), contributing to 4.2% of the variance. It also correlated positively and significantly with problem-focused coping ($p<0.05$; r=0.20).

Table 24. **Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on emotional withholding (WCC)**

IV	t. VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	0.0	NS	0.000	-0.08	NS
N	3.4	p<0.001	0.149	0.39	p<0.001
P	0.2	NS	0.000	0.08	NS
L	0.2	NS	0.000	-0.05	NS

IV	= Independent variable
SIGNIF.(REGR)	= Significance of regression
SIGNIF.(CORR)	= Significance of correlation

E	= Extraversion	N	= Neuroticism
P	= Psychoticism	L	= Lie
NS	= Not significant		

Neuroticism contributed significantly to emotional withholding (R^2=0.149; p<0.001), contributing 14.9% of the variance. Neuroticism correlated positively and significantly with emotional withholding (p<0.001; r=0.39). High scorers on neuroticism were more likely to use emotional withholding as a way of coping.

<u>Table 25</u>. **Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on self-blame (WCC)**

IV	$t.$ VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	0.7	NS	0.006	-0.01	NS
N	3.9	p<0.001	0.193	0.44	p<0.001
P	1.1	NS	0.015	-0.05	NS
L	0.1	NS	0.000	-0.09	NS

IV = Independent variable

SIGNIF.(REGR) = Significance of regression

SIGNIF.(CORR) = Significance of correlation

E = Extraversion   N = Neuroticism

P = Psychoticism   L = Lie

NS = Not significant

Neuroticism contributed significantly to self-blame (R^2=0.193; p<0.001), accounting for 19.3% of the variance. Neuroticism also correlated positively and significantly with self-blame (p<0.001; r=0.44).

Table 26. **Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on growth (WCC)**

IV	t VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	1.6	p<0.01	0.038	0.19	p<0.01
N	1.0	NS	0.016	0.09	NS
P	0.5	NS	0.003	0.07	NS
L	0.2	NS	0.000	-0.06	NS

IV   = Independent variable

SIGNIF.(REGR)   = Significance of regression

SIGNIF.(CORR)   = Significance of correlation

E   = Extraversion   N   = Neuroticism

P   = Psychoticism   L   = Lie

NS   = Not significant

Extraversion contributed significantly to growth-oriented coping (R^2=0.038; p<0.01), accounting for 3.8% of the variance. Extraversion correlated positively and significantly with growth-oriented coping (p<0.01; r=0.19).

Table 27. **Stepwise regression and correlational analyses: Eysenck's personality variables (EPQ) on help-seeking (WCC)**

IV	t. VALUE	SIGNIF. (REGR)	R^2	r	SIGNIF. (CORR)
E	0.5	NS	0.004	-0.06	NS
N	1.4	NS	0.028	-0.17	p<0.10
P	0.2	NS	0.000	0.02	NS
L	1.5	NS	0.033	0.14	NS

IV   = Independent variable

SIGNIF.(REGR)   = Significance of regression

SIGNIF.(CORR)   = Significance of correlation

E   = Extraversion   N   = Neuroticism

P   = Psychoticism   L   = Lie

NS   = Not significant

There were no contributors to the prediction of help-seeking. Neuroticism correlated negatively and significantly with help-seeking (p<0.01; r=-0.17).

4.6 SUMMARY

The main findings of the present study may be summarised as follows:

(a)   In this sample of child care workers, there are levels of burnout which could compromise their physical and emotional well-being. Over half (51.5%) of the subjects reported high burnout in terms of a diminished sense of personal accomplishment. Just under half (47.5%) reported low degrees of emotional exhaustion. Approximately a third of the subjects reported moderate to low levels of burnout in all three domains. Only 17% of subjects reported high depersonalisation.

(b)   Burnout and ways of coping (as measured by the MBI and WCC respectively) were found to be significantly related. Emotion-focused coping seemed to be the most frequently used response to burnout, with problem-focused coping strategies the least frequently used. Both emotion- and problem-focused coping strategies contributed significantly to the burnout response.

(c)   A significant relationship was found between personality as assessed by the EPQ, and burnout. Neuroticism contributed a significant proportion of the variance in all three dimensions of burnout, particularly emotional exhaustion and depersonalisation. Extraversion and psychoticism ("tough-mindedness") contributed significantly to predicting personal accomplishment.

(d)   A significant relationship was found between personality and ways of coping. Neuroticism contributed significantly to the prediction of emotion-focused coping strategies, particularly wishful thinking and self-blame. Extraversion was found to contribute significantly to problem-focused coping and growth-oriented coping.

(e)   Demographic variables were found to influence both burnout and coping

responses. Subjects' age and the number of years spent in child care work impacted upon the levels of emotional exhaustion and depersonalisation reported. 'Coloured' and 'Indian' subjects reported using problem-focused coping more frequently than did 'black' and 'white' subjects. 'Black' subjects were less likely to use self-blame as a coping technique.

CHAPTER FIVE

DISCUSSION

5.1 INTRODUCTION

The present study added to previous research related to personality, coping and occupational stress by placing comprehensive personality and coping taxonomies within the domain of occupational burnout. This was examined within the context of child care work, a relatively neglected population and one that is characterised by high levels of staff burnout and turnover (Pearce, 1990). The focus was on the roles of personality and coping in the stress system, which were investigated using Eysenck and Eysenck's (1975) personality constructs of extraversion-introversion and neuroticism, and Maslach and Jackson's (1981) three-pronged conceptualisation of burnout. It was hypothesised that burnout (as measured by high scores on emotional exhaustion and depersonalisation, and low scores on personal accomplishment) would be associated with personality (neuroticism and extraversion), coping (emotion-focused and problem-focused coping) and demographic characteristics (such as age and experience).

Because of the dynamic and complex nature of the stress system, it was impossible to investigate relationships between variables in isolation in order to determine causality. This study aimed instead to highlight the most striking relationships between variables, to attempt to account for them, and to inquire into their theoretical and, to a lesser degree, their practical implications.

5.2 BURNOUT

Basson and van der Merwe (1994) noted that Maslach and Jackson's (1981) conceptualisation of burnout as existing on a continuum is important in interpreting results. Burnout was thus found to be present in the whole of the present sample, to varying degrees of intensity and frequency. It would appear that, in this sample of child care workers, there were levels of burnout which could compromise physical and emotional well-being (Table 4).

The present sample's mean scores on emotional exhaustion were significantly lower than Maslach's norms for social workers however, indicating less emotional exhaustion in the present sample (t(69) = -4.13; p<0.0005). When compared against Maslach's (1981) norms for social workers, mean scores on depersonalisation were similar (p>0.05). Mean scores on personal accomplishment were slightly higher relative to Maslach's social worker norms, indicating a lower sense of personal accomplishment in the present, child care worker, sample (t(69) = -4.26; p<0.0005). The present sample's results were compared by means of a simple t-test with norms from two other samples of helping professionals (educational psychologists and pentecostal ministers), also obtained from the KwaZulu-Natal region (cf. Appendix D). No significant differences were found (p>0.05). Interestingly, in a United States study, Jayaratne and Chess (1984, in Savicki, 1993) discovered that patterns and causes of burnout could not be generalised across jobs occupied by child care and social workers.

Nevertheless, differences in, for example, the ethnic, gender and occupation variables were likely to be influencing the comparison with Maslach and Jackson's (1981) norms. It also seems reasonable to speculate that the present, South African, sample was likely to be struggling with different stressors from those that were experienced by the former sample (which was 90% Caucasian and `highly educated'). The present sample is dealing with the cultural integration of the workplace, for example, and half of the present sample come from a background of sociopolitical turmoil and disadvantage. It may be reasonable to hypothesise that the majority of the present sample entered the field from an already disadvantaged position in terms of education, thus elevating their

scores which relate to perceived personal accomplishment and success, for example.

Approximately a third of the subjects reported moderate to low levels of burnout in all three domains. Only 17% of subjects reported high depersonalisation, or a sense of detachment and callous feelings towards the recipients of their care. Almost half of the sample reported low levels of emotional exhaustion (45.7%); and 24.2 % reported high emotional exhaustion. It seems possible that the relatively low degrees of emotional exhaustion and depersonalisation are a function of the "outrageous idealism" or denial, referred to by Gerdes (Basson & van der Merwe, 1994). Perhaps, as they struggle to acknowledge their feelings of failure at work, the child care workers magnify their ideals in order to buffer against experiencing the full impact of depersonalisation and emotional exhaustion. This defense does not seem to be succeeding however, as over half (51%) of the subjects reported high burnout in terms of diminished personal accomplishment, or feelings of failure and incompetence (Table 4) (discussed further below).

Manlove (1994) notes that emotional exhaustion and depersonalisation both deal with the interpersonal aspects of work, and are, in fact, considered by some to be part of a single construct (Green, Walkey & Taylor, 1991, in Manlove, 1994). They also focus on negative aspects of work, while personal accomplishment focuses on positive aspects (e.g. whether child care workers feel they are having a positive impact on children's lives). Social support may buffer against emotional exhaustion and depersonalisation by helping staff to redefine their experiences in less negative ways. Social support was not a variable that was investigated in the present study, but would seem to be a useful dimension for future research to explore in the present context.

The levels of burnout in the present sample suggest that the child care workers in the sample are employing relatively inappropriate or inadequate coping strategies in this particular context, or that they perceive greater stress precisely because their ways of coping are not proficient or not appropriate.

5.3 BURNOUT AND COPING

As anticipated, emotion-focused strategies (those which attempt to alleviate or eliminate the emotional distress accompanying the stressor, at the same time avoiding direct confrontation with the stressor), were found to be significantly and positively correlated with all three aspects of burnout (Tables 15-17). It seems then that the child care workers may actually increase their emotional exhaustion by employing these emotion-focused coping strategies.

Indeed, Pearlin and Schooler (Hurrel, 1989) state that emotion-focused coping strategies are ineffective when applied to occupational problems, but are more effective when applied in areas of personal functioning in the home situation. The occupational context is generally more impersonal, and permits individuals less control over their work setting[6]. Further, these responses are likely to exacerbate burnout, as described in, for example, Cox & Mackay's (1978) feedback or transactional model of the stress system.

Self-blame accounted for a significant percentage of the variance in emotional exhaustion (Table 15, $R^2=0.15$, $p<0.005$). Savicki (1993) reports links between low self-esteem, self-blame and burnout in child care workers. It may be that blaming her or him self for not being better able to cope is congruent with the individual's negative self-concept (including low self-esteem and perceived self-efficacy), which therefore remains intact and is reinforced.

Wishful thinking (Table 16, $R^2=0.13$, $p<0.005$) and emotional withholding (Table 16, $R^2=0.20$, $p<0.005$) account for significant proportions of the variance in depersonalisation respectively. These ways of coping imply the use of humour, fantasy

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[6]   Pearce (1990) argues that this trend is changing within the child care setting, where there seems to be an increased emphasis on teamwork and interdisciplinary cooperation.

and denial, and an unwillingness to accept help from others or to express distress. In this way attention is withdrawn or redirected from the source of the problem towards unrealistic possibilities and personal short-comings, rather than towards realistic appraisal of the difficulty and personal resources. This may be because the problem is appraised as being insurmountable and not within the individuals' control (Eagle, 1987). In the occupational setting described in this study many of the stressors are intrinsic to the job, are part of the complex and established institutional structure, and are not amenable to immediate change (Pearce, 1990).

Emotion-focused coping may reflect the low self esteem, low perceived self-efficacy and external locus of control reported by Savicki (1993) and found to be associated with higher levels of burnout in child care workers. It is possible that it permits the child care worker to maintain a "self-deceiving projected image of being in control" (Laux, 1986, in Basson & van der Merwe, 1994), when in reality there may strong feelings of inadequacy present. Coupled with the low perceived self-efficacy described by Savicki (1993) as characteristic of many child care workers, and the emotional investment that would be necessary to maintain this defensive position (Basson & van der Merwe, 1994), burnout seems to be the inevitable outcome.

As the accumulating stress leads to feelings of being emotionally exhausted and extended by their jobs, the child care workers seem to defend themselves by withdrawing emotional energy and investment from the children, becoming more detached in order to work efficiently[7] (see the positive correlation between emotional exhaustion, wishful thinking and emotional withdrawal, Table 15, r=0.35, p<0.005; r=0.24, p<0.025 respectively).

An alternative explanation may be found in Cooper's (1986, in Horner, 1993) finding that masochistic defenses operate within the burnout syndrome. Feelings of

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[7]   Interestingly, Deery-Schmitt and Todd (1993) refer to "withdrawal cognitions", i.e. thinking of resigning, searching for another job or intending to resign. They note that this has not been studied within the child care work context.

discouragement and loss of interest lead to self-blame for these feelings. This is thought to be translated into projected aggression against the recipients of the care (note the positive correlation between self-blame and depersonalisation, or callous detachment from the recipients of care, Table 16, r=0.33, p<0.005).

Hence although withdrawal may serve to protect the child care workers against feeling exhausted and from interacting emotionally with the children and with their co-workers any further, it may also result in the feelings of guilt and personal failure described in depersonalisation and diminished personal accomplishment (Maslach & Jackson, 1986). (Note the negative correlation between personal accomplishment and wishful thinking, Table 17, r=-0.25, p<0.05: as wishful thinking increases so levels of perceived personal accomplishment decrease). Guy (1987) argues that needing to help and feeling compassion for others in stress is often the motivating factor behind many people entering the helping professions. This ideal may conflict with the realities facing child care workers, and with their personal feelings of exhaustion and emotional overload. Burnout comes about as a consequence of the loss of ideals, narcisstic depletion, the loss of purpose, the loss of self-definition, the loss of self-esteem, and the loss of valued self-other interactions in which the self may feel alive or validated (Horner, 1993, p.139).

Indeed, wishful thinking (Table 17, R^2=0.14, p<0.005) contributed a significant percentage to the variance in diminished personal accomplishment. As mentioned above, Maslach (1982) describes the development of this aspect of burnout as resulting from the feelings of guilt and distress following on the negative thoughts and actions that the individual may have shown towards the recipients in her or his care, resulting in feelings of failure and incompetence. That this is a significant area of concern for the majority of child care workers in the present sample was reflected in the analysis of the results of the MBI, as burnout was found to manifest primarily in terms of diminished personal accomplishment (Table 4). A regression using all personality variables and ways of coping on diminished personal accomplishment would be necessary to confirm the significance of coping in this result.

The significant (if small) contribution made by problem-focused coping to diminished personal accomplishment (Table 17, $R^2=0.06$, $p<0.005$) makes sense in light of the positive correlation found between these two variables (Table 17, $r=0.26$, $p<0.025$). It seems that as individuals' reported use of problem-focused coping increases, so their sense of personal accomplishment increases. Problem-focused strategies are aimed at changing the source of the problem, and if successful should provide the person with an increased sense of personal accomplishment, and thus self-efficacy and self-esteem (Savicki, 1993; Lu, 1995). It is therefore reasonable to expect that the use of these strategies would buffer against the development of burnout in these individuals. Similarly, higher scores on measures of emotion-focused coping are associated with higher levels of burnout (Manlove, 1993).

Horner (1993) notes that although certain characterological vulnerabilities may not interfere with the person's capacity to do her or his work appropriately and effectively, "they may nevertheless lead to a gradual erosion of enthusiasm and energy for the work if not of his or her overall health" (p.137). Basson and van der Merwe (1994) emphasise that if this were to develop into an attitude of indifference, the effectiveness of the service provided would probably be seriously compromised by a lack of genuineness and warmth that is essential for adequate care[8].

5.4 BURNOUT AND PERSONALITY

Neuroticism ("emotional stability") contributed a significant proportion of the variance in all three dimensions of burnout, particularly in relation to emotional exhaustion (Table 18, $R^2= 0.219$, $p<0.001$). A possible explanation may be that the constructs of "burnout" (notably emotional exhaustion) as conceived of by Maslach (1981), and "neuroticism" as conceived of by Eysenck and Eysenck (1975), may be in fact not be completely discrete and qualitatively different entities. Indeed, the strong association

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[8]   It is not possible to speculate about the quality of service rendered by the present sample of child care workers, but this seems to be an area worthy of investigation.

between neuroticism, emotional exhaustion and depersonalisation is in line with previous work linking coping styles and well-being (e.g. Manlove, 1993; McCrae & Costa, 1986), which will be discussed below. Further, Sutherland and Cooper (1990) state that "some debate exists on whether anxiety and neuroticism may or may not be the same disposition and if the distinction is correctly being made between trait and state conditions of anxiety/neuroticism" (p.72). Manlove (1994) states that neuroticism and burnout have been largely unexplored, and it would seem essential to examine this relationship further.

Neuroticism, as measured by the Eysenck Personality Questionnaire (EPQ), is a personality trait which is present, in varying degrees, in everybody (Eysenck, 1975; Sutherland & Cooper, 1990). Those scoring high on neuroticism are described as "emotionally over-responsive" or highly reactive (Eysenck & Eysenck, 1968), the implication being that it takes these people longer to return to normal following emotional events. Child care work involves constant social and emotional interaction with children (Pearce, 1990). Those child care workers who are highly reactive in emotional encounters are likely to be frequently, if not always, emotionally stressed (Manlove, 1993). Further, neuroticism has been associated with low self-esteem, learned helplessness and an external locus of control (Furnham, 1992; Lu, 1995). These have been related to burnout in child care workers, although the direction of causality remains unclear (Savicki, 1993). It is not surprising therefore that higher levels of emotional exhaustion were associated with neuroticism (note the positive correlation between neuroticism and emotional exhaustion, Table 18, r=0.47, p<0.001).

The development of emotional exhaustion in the neurotic scorer may be explained in terms of Horner's observation (1993) that, to the extent that one's professional identity and ego ideals include components of being able to intervene effectively and positively in the lives of the recipients of one's care, discouragement or feelings of not coping are exacerbated by a further loss of self-esteem and role definition. He states that "feelings of impotence or loss of social value may be evoked when there is an overreliance by the caregiver on his or her professional role as a source of identity and self-esteem" (Horner, 1993, p.140). This is particularly likely to occur with high neurotic scorers, who

Amirkhan et al (1995) describe as typically being perfectionists, who tend to lack self-confidence and are conscientious with their work. An added contextual influence may be that child care work in South Africa is characterised by low social and economic status (Pearce, 1990).

Neuroticism contributed significantly to the proportion of variance in depersonalisation in the present sample (Table 19, $R^2=0.140$, $p<0.005$). Furnham (1981, in Sutherland & Cooper, 1990) found that in stressful interpersonal situations attempts are made by high neurotic scorers to reduce levels of intimacy. Distancing themselves from the children (and, it is likely, their co-workers too) could therefore be a familiar coping mechanism to revert to when the stress is experienced as overwhelming. The low self-esteem, learned helplessness and external locus of control characteristically associated with high neurotic scorers (Horner, 1993; Lu, 1995) may further account for the tendency to withdraw from stress as opposed to actively and directly coping with the source of the difficulty.

Psychoticism (Table 20, $R^2=0.12$, $p<0.05$) ("tough-mindedness") contributed significantly to diminished levels of personal accomplishment. The negative correlation between psychoticism and diminished personal accomplishment indicated that the more "tough-minded" scorers reported a greater sense of personal accomplishment (Table 20, $r=-0.35$, $p<0.005$). It seems likely that this is related to stronger self-esteem and sense of self-efficacy in these individuals (Furnham, 1992).

Personal accomplishment was the only dimension of burnout that extraversion was significantly related to, and this was in the direction of less burnout (i.e. a lower sense of diminished personal accomplishment) (Table 20, $R^2=0.24$, $p<0.01$). Given that extraversion has been associated with increased sociability and hardiness (Lu, 1995; Matthews, 1992), it would make sense that the extraverted scorers would indeed be less ready to perceive themselves as failures than those more introverted individuals. Amirkhan et al (1995) made the observation that "personality is not simply a distal influence mediated by self-esteem, but instead accounts for the apparent relationship between self-esteem and support-seeking" (p.201).

Commenting upon her finding that extraversion was completely unrelated to burnout, Manlove (1993) notes that one possible explanation lies in the way that extraversion is measured. The items on the EPQ focus on adults (Eysenck & Eysenck, 1975). It is possible that an individual who is introverted in relation to adults may be more extraverted around children. This may help to account for the fact that extraversion was related significantly only to personal accomplishment dimension of burnout in the present sample. Nevertheless, it also makes sense that the experience of stress is likely to be buffered by the readily available social support system characteristic of the sociable and expressive high extraversion scorer (Eysenck & Eysenck, 1975).

5.5 PERSONALITY AND COPING

Significant contributions were made towards the percentage of variance in neuroticism by wishful thinking, (Table 21, $R^2=0.239$, $p<0.001$), acceptance (Table 22, $R^2=0.044$, $p<0.010$), emotional withholding (Table 24, $R^2=0.149$, $p<0.001$) and self-blame (Table 25, $R^2=193$, $p<0.001$). High neuroticism scorers thus tended to adopt emotion-focused as opposed to problem-focused coping strategies (as outlined above). Wishful thinking and self-blame tended to be the most frequently reported ways of coping used by the neurotic scorers. Interestingly, there were no significant contributors to the help-seeking variable, possibly questioning the usefulness of this scale; help-seeking did correlate negatively with neuroticism, a finding which is discussed further below.

That high neurotic scorers tend to use emotion-focused as opposed to problem-focused coping confirms previous research (e.g. Carver et al, 1989; Lu, 1995) and is an appropriate finding in light of Eysenck and Eysenck's (1975) description of the high neuroticism scorer as typically anxious, psychosomatic sufferers, rigid in their thinking, overly reactive and emotional. Given this, and the fact that these individuals subsequently often have difficulty adjusting to stress (Furnham, 1992), it is reasonable to propose that the child care workers in the present sample who have stronger neurotic traits tend to employ coping strategies which are less useful in moderating the stress experience than others. Again, the child care workers may actually increase their emotional exhaustion by employing these coping strategies, (see the positive

correlations between emotional exhaustion and neuroticism, Table 18, r=0.47, p<0.001). The maladaptive nature of emotion-focused coping in the context of child care work has been discussed above. Neuroticism may exacerbate this however as the problem is more likely to be seen as insurmountable, and out of the individual's control, by the high neurotic scorer (Amirkhan et al, 1995). This may be due both to the low perceived self-efficacy typically associated with neurotic scorers (Lu, 1995) and to the relatively rigid institutional constraints operating in the child care context (Pearce, 1990).

The high neuroticism scorer also tends to use strategies such as denial and refusal to accept emotional support from others (see the negative correlation between neuroticism and help-seeking, Table 27, r=-0.17, p<0.10). Perhaps at some level this represents an attempt to maintain a coping self-image, when in reality the individual may not be managing to control feelings of inadequacy. Other factors in operation may be "typically anxious over-commitment to their work" and low perceived self-efficacy, discussed by Lu (1995). Again, such defenses would require considerable emotional investment (Basson & van der Merwe, 1994), and burnout seems to be likely. As stress accumulates and the individual struggles to adjust, the need to withdraw may become dominant as discussed earlier. Neuroticism contributed a significant proportion of the variance in wishful thinking (Table 21, R^2=0.239, p<0.001) and emotional withholding (Table 24, R^2=0.149, p<0.001), both of which may be viewed as strategies which involve some form of detachment and may be followed by the feelings of guilt and personal failure described earlier.

Neuroticism also accounted for a relatively small but significant proportion of the variance in acceptance of the stress once it has emerged (Table 22, R^2=0.044, p<0.010). It seems possible that, given the perfectionistic characteristics typical of neurotic individuals (Furnham, 1992, Manlove, 1993), they may be attempting to maintain a coping persona by compromising, selectively ignoring the issues and finding substitute activity. In Horner's words "The professional ego ideal sets the stage for the experience of shame and for the establishment of defenses against personal vulnerability" (p.138). Another possibility is that accepting the stress may serve to

reinforce and confirm the already low sense of self-efficacy associated with neurotic scorers. An interesting alternative hypothesis is implied in Cooper's (Horner, 1993) finding that narcisstic defenses are also in operation against burnout, which may indirectly nurture the individual's self-esteem. This occurs when, adhering to the guidelines of the professional ego ideal, the child's perceived destructiveness (a projection from the caregiver's aggression) may yield masochistic-like gratification, a source of compensatory self-esteem that counteracts the child's devaluations. Could this help to account for the (small) number of child care workers that stay on in their work, even though they are suffering from burnout? (Tables 11-12; Figures 5-6).

As anticipated, extraversion accounted for a significant if relatively low proportion of the variance in problem-focused coping (Table 23, $R^2=0.042$, $p<0.05$), and growth (Table 26, $R^2=0.038$, $p<0.010$). Problem-focused coping involves active and direct activities geared towards the modification, avoidance or minimisation of the impact of the stressor, or cognitive activity that leads to the belief that the stressor can be controlled (Lazarus, 1993). This finding is therefore consistent with Eysenck and Eysenck's (1975) conceptualisation of the extravert as being drawn more to external reality than to subjective ideas. As mentioned above, the high extraversion scorer typically has a readily available social support system (Amirkhan et al, 1995; Eysenck & Eysenck, 1975; Manlove, 1994). Amirkhan et al (1995) argue that the behavioural predilections associated with extraversion may directly affect coping responses, making the gregarious extraverts more likely to seek out others than withdrawing or escaping; this tendency may even be magnified under stress. Hence problem-focused efforts are likely to involve increased social support, peer cooperation, advice, information and empowerment (Manlove, 1993). With these resources the person is better able to deal with the source of the difficulty, thus enhancing coping capacity and adjustment. No significant relationship was found between the help-seeking scale and extraversion in the present sample however (Table 27).

It is interesting to note Amirkhan et al's (1995) finding that optimism is a facet of extraversion; these authors argue that this promotes active, direct coping. Indeed, in the present sample the more extraverted individuals tended to use growth-oriented

coping strategies. This suggests that they recognise the creative potential presented by stressful situations more readily (Folkman & Lazarus, 1980), which also implies that their relative success under duress is likely to be due to more than the support of peers. Indeed, Lu (1995) suggests that extraverted individuals have a stronger sense of internal control.

To make a conclusive deduction about the function of coping in child care workers one would need to assess the relative contribution of personality variables and their interactions with specific work situations (Basson & van der Merwe, 1994). One would also need to know more about the specific manner in which the child care worker actually employs coping strategies to be able to definitively evaluate the reasons for maladaptive coping (Lazarus, 1993).

5.6 DEMOGRAPHIC VARIABLES

Demographic variables were found to influence both burnout and coping responses. The findings of previous research have been mixed in relating age, work experience and job satisfaction to burnout in both child care worker and general populations (Deery-Schmitt & Todd, 1995; Manlove, 1994; Savicki, 1993).

5.6.1 Age[9]

In the present study subjects' age impacted significantly on emotional exhaustion (Table 8, F=4.24, p<0.0023) and depersonalisation (Table 8, F=2.55, p<0.0369).

It was found that those subjects in the 34-41 year old age range experienced the most burnout in terms of emotional exhaustion (Table 9, Figure 2). One may assume that those child care workers within the 34-41 year old age group are likely to have achieved some sense of career identity (Marcia, 1966). It seems that this is challenged at a stage when the need to achieve productivity in their work and families is most pertinent (Erikson, 1968). The high degree of burnout in this group highlights the statement that "Our emotional investment in each of our patients is large, our propensity for disappointment is great, and our opportunities for reward are deliberately limited" (Cooper, 1986, in Horner, 1993, p.141). He was referring to psychotherapists, but the application to child care workers is clear.

Although no significant relationship between age (or experience) and diminished personal accomplishment was found, it may be that this age group is defending strongly against acknowledging their vulnerability: a defense, again, that in itself would be emotionally draining (Basson & van der Merwe, 1994). Levels of depersonalisation for this age group were also high, suggesting that they were becoming more detached in order to cope with feelings of exhaustion. These defenses would be particularly strong during this period, as individuals' career identities and ideals are being challenged, possibly for the first time (Blustein, Devenis & Kidney, 1989; Horner, 1993).

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[9]   Due to the potential influence of mid-life crisis and retirement (two important life stages in the evolution of burnout, according to Sutherland and Cooper, 1990, and Super, 1980), subjects' ages were grouped into relatively small classes. The price that was paid for potentially enriching the discussion of this variable was that only three subjects were placed in the 58-65 category. This resulted in an artificial magnification of the burnout scores for these individuals, a reminder that must apply for all discussion of demographic variables.

That the 18-25 year old age group reported the lowest levels of emotional exhaustion is not surprising, in light of the fact that these child care workers were likely to still be idealistic, enthusiastic and optimistic about their careers (Maslach, 1982). Anglin (1993) comments on the feelings of competence, limit setting, increase in expertise and self-awareness that are characteristic of the first year of child care work practice. These problem-focused and growth-oriented coping techniques are likely to buffer against the development of burnout at this stage, although they may also result in disappointment, discouragement and an unrealistic approach to job demands (Manlove, 1993). This may be due partly to the fact these individuals are likely to be in the stage of "moratorium" in relation to establishing a sense of career identity (Marcia, 1966), a stage characterised by uncertainty and exploration. This may be stressful but may also buffer against stress, as it is probably accompanied by lower degrees of career commitment, and therefore less emotional investment (Blustein et al, 1989).

Emotional exhaustion and depersonalisation both escalated rapidly for the next age group (Table 10, Figure 3). Some investigation into this group's motivation for doing child care work at this stage would have been useful, for example as many may have been doing it as a way to earn money after school and not as a chosen career. This would also help to maintain levels of optimism and hinder burnout (Amirkhan et al, 1995).

It is interesting that levels of depersonalisation, while still relatively low, were greater than those of emotional exhaustion for the 18-25 year old group. This may indicate that the stresses of starting work and becoming autonomous are beginning to mount, in addition to those intrinsic to the job. Although not yet greatly emotionally exhausted at this stage, individuals seem to be protecting themselves from sources of stress by detaching themselves somewhat from their work. This result relates to the high degree of emotional exhaustion in those child care workers who have been in the field for between one and five years (Anglin, 1993; Table 11, Figure 4; see below).

Indeed, burnout in terms of depersonalisation was highest in the 26-33 year age group. Depersonalisation was lowest among the 42-49 year olds, and then increased slightly

for those over 50. It must be borne in mind however that the latter two groups were relatively small and this would have distorted the results somewhat. Nevertheless, it would be reasonable to speculate that, as Anglin (1993) suggests, perceived stress may decrease as caregivers develop a repertoire of adaptive coping skills, and when their own children leave, one source of stress is eliminated. This was a surprising result in light of Sutherland and Cooper's (1990) finding that the stage of mid-life crisis is likely to exacerbate levels of burnout.

That the 42-49 year old age group suffered more emotional exhaustion and less depersonalisation is suggestive of an outward focus, towards the recipients of their care, and to the detriment of the child care workers' own emotional well-being. This may be an effort to distract themselves from life's changes and/or as a focused and concerted effort to put the most into their work (Manlove, 1994; Sutherland & Cooper, 1990).

Retirement and the stress of facing a stage in new life (Sutherland & Cooper, 1990) may account for the increase in both depersonalisation and emotional exhaustion for the over 50 year old age group. Indeed, the very small number of people in the sample who were over 50 may be due to retirement factors, and/or burnout. The former may hold true given Wheato's speculation that "the life course perspective directs our attention to the fact that stress exposure accumulates in a biography over a lifetime" (in Manlove, 1994, p.91).

5.6.2 Experience

The number of years spent in child care work also impacted on emotional exhaustion (Table 8, F=11.66, p<0.0001) and depersonalisation (Table 8, F=7.69, p<0.002). Deery-Schmitt and Todd (1993) note that age and experience tend to be correlated with each other and with outcomes such as job satisfaction[10].

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[10]   Job satisfaction was not included in the analysis of the results, as only three people answered this question (discussed below).

Emotional exhaustion is found to be highest in those individuals who have been working for between one and five years, mentioned above (Table 11, Figure 4). This makes sense in light of Anglin's (1993) statement that there are two periods when child care workers are most likely to leave due to burnout: during the first year, and approximately three to four years later, when the provider's own children begin school. Also, Deery-Schmitt (1993) observes that when child care workers begin to have children of their own stress levels tend to escalate. This seems an unlikely, if reasonable, hypothesis for the present sample however, as whether or not child care workers had children of their own did not affect coping or burnout.

It is interesting to note that depersonalisation escalated over the course of time, and was greatest in the group that had been working in child care for over ten years (Table 13, Figure 5). It seems that by detaching themselves from their work, establishing emotional distance from the recipients of their care, these individuals cope with the stress inherent in their work. This finding is of concern in relation to the quality of the care provided, given the necessity of emotional warmth and genuineness in child care work, mentioned above. Indeed, as noted by Basson and van der Merwe (1994), "Although it appears that persons in the helping professions are largely professionally competent and dedicated, the intense emotional demands of human service work may inevitably result in burnout" (p.35).

This pattern, in addition to the high staff turnover that is reported amongst child care workers after three years (Pearce, 1990), supports the notion of a cumulative effect of burnout mentioned above. It may be speculated that, since personal accomplishment did not relate to experience or age, those subjects who have been child care workers the longest have become resigned to their emotional detachment, and perhaps it is this very coping strategy that has enabled them to work in the field for so long. Alternatively, it may be that only child care workers who experience relatively low levels of stress remain for longer periods.

It is interesting to note that diminished personal accomplishment did not relate to age or the number of years spent in child care work. This dimension may have been

expected to be emphasised during burnout as the individual focuses on past achievements and future goals. Given the high degree of diminished personal accomplishment reported in the present sample, it is possible that this dimension of burnout is more affected by ways of coping and personality, for example, than by the age and experience of the child care workers. Further statistical analysis would be necessary to confirm this speculation.

5.6.3 Ethnic identity

Just over a third of the subjects in the sample were 'white', which must be borne in mind when considering the results (Table 2). Ethnic identity was found to be significantly related to problem-focused coping (F=2.98, p<0.0382) and to self-blame (F=2.76, p<0.0396). 'Coloured' and 'Indian' subjects reported using problem-focused coping more frequently than did 'black' and 'white' subjects (Table 13, Figure 6). It seems that 'black' and 'white' subjects were less likely to generate alternative solutions and implement decisive behavioural planning in order to address their difficulties than their 'coloured' and 'Indian' counterparts. This, together with the finding that 'black' subjects were less likely to use self-blame as a coping technique (Table 14, Figure 7), may suggest that 'blacks' and 'whites' have more of an external locus of control, and are less likely to believe that their difficulties are within their capacities to change.

Pearlin and Schooler (1978) and Eagle (1987) note that "social structural conditions may influence the development of certain coping repertoires" (p.23). Antonovsky (Cooper & Payne, 1991) questions the proximal and distal situational, structural, cultural and historical origins of personality, the implication being that the differences found are likely to be rooted in the sociopolitical background of these individuals. For example, for the 'white' population in the present sample, passivity and acceptance may have formed within the autocratic institutional regimes of a decade or so ago, remnants of which are still found in some institutions today (Pearce, 1990). For the 'black' subjects, a weak internal locus of control may be grounded in the lack of autonomy and role models which has dominated the majority of South Africa's population until recently.

There appears to be very little literature examining social conditions, culture, burnout and coping: this would seem a very pertinent research area, given the cultural diversity that has begun to characterise the workplace (notably children's homes) in South Africa today.

5.6.4 Demographic variables that were not significant

Variables such as marital status, cohabitants, the presence of the subjects' own children, the number of children worked with, weeks' leave and membership of community organisations have been found to be significantly related to burnout and coping in previous research (e.g. Anglin, 1993; Curbow, 1990; Jenkins, 1991; Manlove, 1993). Whilst these findings have reported mixed results, they have been explained primarily in terms of social support variables and personal resources, with greater levels providing a buffer against stress and burnout. In the present study these variables did not influence the results significantly however. Perhaps, as has been suggested by Kyriacou (Manlove, 1993), the importance of these "biographical characteristics" lies in their role as moderators of the association between other factors and burnout. Jenkins (1991) reports findings of non-significant results concerning demographic variables (e.g. Cochrane & Stopes-Roe, 1980, in Jenkins, 1991), but does not speculate about these, suffice to point out that the consideration of demographic aspects of stress is highly complex and "bedeviled by the various interpretations of the term" (p.125). He goes on to note that "demographics are gross structural variables, and it is the particular quality of the experiences that are associated with the role which are significant in supplying the medium through which environmental stress and support are encountered" (Jenkins, 1991, p.125).

It seems that research methodology needs to be increasingly refined if a more subtle understanding of demographic aspects of stress is to be achieved.

5.7 LIMITATIONS OF THE PRESENT STUDY

There are aspects of this study that make it necessary to qualify any conclusions drawn from the results. Essential to the present investigation would have been to identify which of the contributing variables are most significant in terms of the burnout response. For example, did personality variables contribute more to the burnout response than coping variables? Did neuroticism, as found by Manlove (1993), contribute the most significant proportion of the variance in burnout and/or coping? Also, a discriminant analysis identifying a high and a low burnout group with their associated characteristics would have been useful. Thus, unavoidably, this study is thus relatively limited in scope.

The proportion of variance in burnout explained in the present study was too small (4-24%) to be certain that the results were not merely due to method variance. Evidently there were other variables contributing to the variance in the results. Giving an indication of the number of possible influences operating in the stress system, Furnham (1992) illustrates five main factors which relate to occupational behaviour: ability, demographic factors, intelligence, motivation, and personality. Although personality is placed at the centre of this model, taking precedence over the other variables, there are clearly other influences present.

Given that organisational factors have a very powerful effect on an individual's work-related behaviour, moderating the effects of personality, it would have been useful to include environmental factors in the study (such as perceived sources of stress, role conflict, work overload etc.), perhaps using hierarchical multiple regression to assess the extent to which variables personality, coping and perceptions of the work setting influence burnout.

Further, stress can originate from sources both within and external to one's profession (Amirkhan et al, 1995). It may therefore also have been useful to assess the

contribution of macro and micro life stressors, possibly using major life events, home-work spillover or daily hassles measures. It is unfortunately impossible to ascertain the efficacy of the coping strategies explored: a measure of stress response may have been useful in this regard. A more comprehensive exploration of demographic factors might have included education, and training, reasons for doing child care and the income levels earned.

Horner (1993) highlights another neglected area of study in this field; he writes,

> Ultimately, the manner in which we live our life outside the work place will either exacerbate the situation or will counteract it. People who make their work their whole life will be significantly more vulnerable to burnout. The importance of developing other sectors of the personality and of building a life beyond work should not be lost...

(p.141).

The instruments used in the present study are relevant to what Lazarus (1993) notes is a criticism levelled against many approaches to research in personality: separate scores on a number of personality variables are generated, rather than synthesising a functional portrait of the whole person. He states that "Fractioning a person into a number of traits does not add up to, or get synthesised into, a living, breathing person struggling in certain ways to adapt to the world and to life (Lazarus, 1993, p. 243). He argues that process measures of coping, for example, need to be placed within the larger framework of a person's life and ways of relating to the world. He goes on to say that the aspect of personality which is most apt to be missed is motivational, i.e. personality consists of general goals and situational intentions that mobilise and direct the choice of coping strategies used.

Hence conceptualising personality in terms of four stable categories cannot be said to adequately accommodate its complexities. Assuming cross-situational, stable coping styles is also questionable, although personality and coping, whether stable or not,

broadly speaking, do seem to play a significant role in the stress system.

The MBI norms were found not to be ideal for the present sample, and it seems reasonable to speculate as to how the constructs of stress and burnout may have changed due to social and commercial influences over the last decade or so, since the MBI was constructed. Ross and Altmeier (1994) recommend the Occupational Stress Inventory (OSI), as a more versatile (but, on the other hand, less thoroughly investigated) measure of burnout to consider. Also, since ethnic differences in coping strategies were found in the present (and e.g. Jung's, 1994) study, and given the rapidly changing occupational context in South Africa, the cross-cultural validity of the Ways of Coping Checklist (Folkman & Lazarus, 1980) may also be open to question (unfortunately, the original norms for this sample were not available). Interestingly, Lazarus (1993) argues that broad coping styles do not adequately explain or predict intraindividual variations, and that it may be erroneous to assume that a subject actually copes in any specific encounter in the way indicated when the word "usually" is used in the measurement. He states that "subjects may be giving nothing more than a vague impression of how they would prefer to cope, perhaps influenced by what they believe is desirable or ideal rather than what they actually have thought or done" (p.246).

Furnham (1992) points out that scores are veridical self-reports of internal states and external behaviour. Hence heavy dependence on self-report criteria of adaptational outcomes increases the possibility that the correlations are confounded somehow by overlapping antecedent and consequent measures (Lazarus, 1993). Response bias may be due to memory distortions, intervening stressors or defense mechanisms. Because of this, the results should be interpreted with some caution, particularly as the proportions of burnout explained were relatively small, and may be attributable to method variance, as mentioned above.

Observational data may have been useful in order to assess whether staff reports have any systematic relation to what actually occurs in a programme. Any links between staff burnout and the quality of care provided therefore remain speculative at this stage. Future work combining staff surveys with systematic observations (and in-depth

interviews) in the children's homes will help to answer questions about this possible link.

It seems likely that the associations found among variables in the present study were attributable, at least in part, to method variance. Once completed, the questionnaires were given to social workers (who generally have a higher status at children's homes than do the child care workers) to return to the researcher. Group administration with the researcher present was not possible, due to the principals of the various homes expressing different requirements in terms of the research time available. Although each subject was given a brown envelope that they were asked to seal, and their names were not required, it is possible that socially acceptable responses were given; (there were no significant correlations between lie scale scores and other variables however). Further, the questionnaires were completed in the subjects' own time, the implication being that although a protocol (cf. Appendix A) was provided with each questionnaire to maximise standardisation, the administration was not absolutly uniform.

The General Information Questionnaires were only available in English. This was because the principal of each children's home reported that all the child care workers were English- speaking. However, Zulu and Afrikaans questionnaires may have yielded richer responses. Whilst the question (and overall) response rate was excellent, the low response rate with the question on job satisfaction is of concern in terms of how well other questions were understood. A pilot trial with the instruments, using a representative sample, would have been useful.

The children's homes were sampled randomly from an index provided by Pietermaritzburg Child Welfare. This was a comprehensive index, including the names of all of the children's homes in KwaZulu-Natal. How representative the stress inherent in these homes is relative to other provinces in the country is questionable however, given the sociopolitical conflict that many of the child care workers and the children under their care have been exposed to. Participation in the study was voluntary, which immediately implies that the sample selected was not truly random. It is possible, for

example, that the more conscientious (and therefore more neurotic?) caregivers took part in the study, or that those with more time (and therefore less burned out?). Generalisations from the present study therefore need to be made with caution.

Importantly, Kerlinger (1986) states that correlational studies are inherently limiting, due to their incapacity to demonstrate causality. Indeed, Hurrel and Murphy (1991) state that where individual difference variables have been investigated, there is little consensus regarding the mechanisms by which they exert their influence. A longitudinal and/or experimental design may have contributed to answering questions such as these. Furnham (1992) questions how personality might be influenced by the workplace, and which direction, personality influencing burnout or vice versa, might be primary. Indeed, Freudenberger (1977) was the first researcher to propose that child care may attract people with predispositions to burnout.

The stress system does not lend itself easily to reductionistic research. Few, if any, of the relationships can be said to be unidirectional. The factors impacting on stress are numerous and not all are accounted for (or, in some cases, adequately accounted for). Interpretation thus involved speculation, and generated a lot more questions than it answered. As Lazarus (1993) argues, the ideal research would study coping (and/or personality and burnout) over time, and across diverse sources of stress in the same people in sufficient numbers to address both its process and trait aspects and to do this with an appreciation of the whole person. This type of research calls for complex, long-term research designs.

5.8 RECOMMENDATIONS FOR FUTURE RESEARCH

Several directions for future study emerged from the present research. These included improving the statistical sophistication in similar research; investigating the role of neuroticism as a particularly significant influence in both burnout and coping; broadening the demographic variables taken into account (particularly training and motivational factors); re-assessing instruments in terms of their current and contextual suitability; and extending the research question into process and longitudinal work.

Although it appears that individuals in the helping professions are largely professionally competent and dedicated, the intense emotional demands of human service work may inevitably result in burnout (Basson & van der Merwe, 1994). It is clear that the occupational hazards of work (particularly child care work) are inescapable, and can be avoided either by leaving the field, or by being defended against. Further research into the dynamics of personality and coping that operate in the burnout process may inform practical intervention, in terms, for example, of the selection, training and support of child care workers.

Lazarus (1993) notes that at present stress-related research appears to have reached an impasse, and that at this point it is not at all clear what future directions are most promising. There seems to have been disappointingly little discussion amongst researchers concerning the next generation of studies that are needed.

5.9 SUMMARY AND CONCLUSION

The sheer complexity of the burnout system has made it a rich and fertile hunting ground for researchers. Black (1991) argues that the lack of much explanatory depth to the construct of burnout may be a result of the paucity of research studies aimed at identifying its personality correlates. The present study added to previous research by helping to explore those personal variables which may be most important in explaining differences in individual vulnerability and burnout. This was undertaken within a population of child care workers, a relatively neglected (perhaps because the child care setting is considered less an adult work environment than a place where children learn and develop) but notoriously `burned out' population, and one that has been characterised by research on job satisfaction rather than burnout (Manlove, 1994).

The aim of the present research was to explore the individual appraisal of stress, the manifestations of stress and the coping process employed in response to appraisal. A goal was therefore to identify those variables which may render some individuals more prone to the development of stress than others.

The results indicated the presence of levels of burnout, manifested particularly in terms of diminished personal accomplishment, which could compromise the physical and emotional well-being of the child care workers in the sample. Burnout and ways of coping (as measured by the MBI and WCC respectively) were found to be significantly related. Both emotion- and problem-focused coping strategies contributed significantly to the burnout response, with emotion-focused coping being the most frequently reported coping strategy.

Significant relationships were found between personality (as assessed by the EPQ), and burnout. Neuroticism contributed a significant proportion of the variance in all three dimensions of burnout, particularly emotional exhaustion and depersonalisation. Extraversion and psychoticism contributed significantly to higher levels of personal accomplishment.

A significant relationship was found between personality and ways of coping. Neuroticism contributed significantly to the prediction of emotion-focused coping strategies, particularly wishful thinking and self-blame. Extraversion was found to contribute significantly to problem-focused coping and growth-oriented coping. Demographic variables, particularly age and experience, were found to influence both burnout and coping responses. Ethnic identity was found to influence the coping strategies used.

Kasl and Rapp's (1991) aetiological approach to the stress-disease association was adopted in the present study, so that both stress and personality variables were seen as potential risk factors for, or antecedents to, health outcomes (see Chapter One). Personality, the coping strategies used, and the manifestations of burnout were thus discussed primarily in terms of their function as defenses, or as efforts to adapt (successfully or unsuccessfully) to the stress being experienced, and as vulnerability factors. The importance of contextual factors in the stress and burnout process, particularly within the current South African context, was also highlighted. Recommendations for future research were made, particularly in light of the fact that evidence for person-related influences should not be construed as diminishing the importance of situation-bound factors. For example, it is possible that while personality dispositions may be linked to some forms of coping, other strategies may be primarily under situational control. The need for more sophisticated statistical analyses (particularly in terms of the present study) was emphasised.

Though relatively limited in scope, the present study contributes to important foundational work that adds to the explanatory precision of burnout, enhancing its relationship to the larger established literature on occupational dynamics. Further, by targeting combinations of provider characteristics that are associated with burnout, prevention efforts may be targeted to high risk providers even before the exact causal links underlying burnout are clearly understood. Furnham (1992) notes that whatever these underlying mechanisms in individual differences prove to be, the re-embracing of personality variables is seen as a valuable step toward the better prediction, and understanding, of coping behaviour and the burnout response.

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APPENDIX A
BEFORE YOU START!!

As you have probably been told, I am a Counselling Psychology masters student (M1), and am doing my thesis on stress and burnout in child care workers.

I would like you to fill in the following questionnaires as part of my research into this area.

In return, I will provide you with feedback as to the results of the study, and will hold a stress management course for those interested, as soon as possible following the completion of the study.

PLEASE NOTE THE FOLLOWING:

* **You do not need to give your name:** each person will be identified only with a NUMBER.
* The questionnaires will take about 1.5 hours to complete. Try and complete them in one sitting, on your own, and somewhere where you will not be disturbed.
* Please answer all the questions, and as honestly as possible.
* Note that there are questions on **both** sides of each page - don't forget to **TURN OVER!**
* Please complete and return the questionnaires within **one week** from when you are given them.
* Once you've completed the questionnaires, please return them in their brown envelopes, sealed, to:

Yours sincerely,

C. Adendorff

THANK YOU FOR PARTICIPATING IN THIS STUDY

APPENDIX B
GENERAL INFORMATION
QUESTIONNAIRE

Research Number

(Please tick √ your choice where appropriate):

* * *

1. Gender

MALE	FEMALE

2. Ethnic Identity

BLACK	WHITE	COLOURED	INDIAN	OTHER

(If `other', please specify ....)

3. Age

18-25	26-33	34-41	42-49	50-57	58-65

4. Marital Status

SINGLE	MARRIED	DIVORCE D	WIDOWED	OTHER

(If `other' please specify: ....)

5. Do you have any children?

YES	NO

6. Who do you live with?

ALONE	WITH SPOUSE /PARTNER	WITH PARENTS	AT THE CHIDREN'S HOME	OTHER (PLEASE SPECIFY)

7. Approximately how many children do you work with per day?

1-5	6-10	11-15	15-19	20+

(If more than 20, please specify number: ....)

8. How many weeks' leave do you take per year?

0	<1	2-3	4-6	6-8	8+

9. Do you belong to any community groups or professional organisations?

YES	NO

If `yes', which ones? Please specify:

10. Tick (√) your general degree of satisfaction with your work:

1.   ... very satisfied

3.   ... slightly dissatisfied

2.   ... quite satisfied

4.   ... very dissatisfied

11. Any additional comments: ....

....

....

CHECK TO SEE THAT YOU HAVE ANSWERED ALL THE QUESTIONS

PLEASE TURN OVER

APPENDIX C

Table 28.   z-Test comparison of the means of the MBI scales of the present sample (child care workers) with pentecostal ministers and educational psychologists.

MBI	CHILD CARE WORKERS (PRESENT SAMPLE) N= 70		EDUCATIONAL PSYCH. N=67		PENTECOST. MINISTERS N=40	
	M	SD	M	SD	M	SD
EE	17.26	9.98	20.56	10.34	18.77	8.36
DP	7.81	5.79	4.55	4.67	5.36	3.86
PA	31.6	9.68	37.86	7.42	35.76	7.14

EE   = Emotional exhaustion

DP   = Depersonalisation

PA   = Personal accomplishment

M   = Mean

SD   = Standard deviation

A t-test comparison of means was carried out for these groups. Mean scores of the present sample of child care workers were similar to those for educational psychologists ($p > 0.05$).