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STRESS, COPING AND ADJUSTMENT IN DUAL-EMPLOYED FAMILIES

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DECLARATION

I hereby declare that this dissertation is my own unaided work and that I have not submitted it for the degree of Master of Arts to any other university.

H.J. Kelly

DEDICATION

I dedicate this dissertation to the loving memory of my brother, Brendan (1968 - 1987), who proved not to be an academic, but a scholar of life's true pleasures.

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I

sincerely thank

Mrs Debbie Kruger, my supervisor, for her

valuable support and guidance,

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ABSTRACT

This study evaluates the utility of a stress-coping paradigm for explaining differences in psychological adjustment to stress among dual-employed family members. Specifically, a model of stress was applied that encompassed a single stressful dual-employed family event, the degree of perceived stressfulness of this event, dual-employed family coping and five dimensions of personal adjustment (two work indicators, two family attitudes and one individual measure). This model was used to assess the mechanisms through which dual-employed family stress and coping are linked to psychological outcomes through two effects. The first being the main effect which states that stress and coping have a uniform effect on well-being, independent of one another. The second being the moderator effect which says that coping moderates the impact of stressful episodes depending on the type, or degree, of stress encountered. Two procedures were applied for analysing data. Firstly, content analysis was applied to the single stressful life events measure and from this the existence of seven forms of dual-employed family stress were established, namely, occupational, domestic chore, child-care, role overload, marital, financial, and stressors arising from external systems encompassed under the label "other". Secondly, moderated multiple regression analyses were conducted to assess the relationship between each dependent, independent and moderator variable and provided statistical support for the operation of both main and moderator effects. This support, however, was found to vary according to context and level of stressfulness of the events. The limitations of the present study are noted as well as the practical and theoretical implications. Furthermore, the implications for future research on stress, coping and adjustment among dual-employed families are considered.

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Chapter 1

INTRODUCTION

In South Africa, the emergence of the dual-employed family has been obscured by issues such as labour relations, corporate culture changes, retrenchments and productivity (Erwee, 1991). Yet, the dual-employed family is an important component of the labour force which is found across all race groups. Also, dual-employed family members often occupy scarce, high level manpower positions (Puckrin, 1990). A dual-employed family is defined as a family pattern which is characterised by separate, but gainful employment by both members of a marital couple (Barling, 1990). This means, therefore, that each partner has both work and family roles. Concern for balancing work and family roles is seen as a major source of stress for dual-employed families and is predicted to be the important career issue of the new decade (e.g., Hall, 1990).

The dual-employed family faces lifestyle stressors that affect, directly or indirectly, individual members, family relations and employers. For example, lifestyle stressors such as reaching an egalitarian division of roles within the marriage, competition between spouses, role conflict, role overload, and a lack of support are stressors that may affect each of the participants and their social interactions. Stressors that directly affect employers are dependant care, restricted geographical mobility and corporate policies relating to family issues (Erwee, 1991).

Coping behaviours have been hypothesised as important resources and responses that dual-employed families depend upon in order to manage the stressors of their lifestyle (e.g., Hall, 1990; Rapoport & Rapoport, 1982; Skinner, 1982). Only a few empirical studies have, however, validated this hypothesis (e.g., Skinner, 1983), and no decisive conclusion as to the importance of coping skills among dual-employed families can be drawn from this research. Consequently, the objective of the present study is to assess the importance of coping behaviours among dual-employed family members in relation to individual (i.e. general psychological health), marital (i.e. marital communication and marital interaction), and organisational outcomes (i.e. job satisfaction and propensity to leave the organisation). This is assessed within a main effects and moderator model which proposes that coping behaviours have a uniform effect on outcomes regardless of the nature, or degree, of stress faced (main effect), or that coping behaviours are dependent on the nature and degree of stress encountered (moderator effect).

To accomplish this, Chapter 2 addresses the dual-employed family and the importance of work/family balance. Thereafter, Chapter 3 focuses on the concept and theory of stress and in particular the stressors of the dual-employed family lifestyle, while Chapter 4 concerns the concept and theory of coping and its relevance to the dual-employed family. The remaining three chapters focus on the method and results of the present study, and a discussion of the findings are presented. Finally, theoretical and practical implications of the research are noted as well as the implications for future research on stress, coping and adjustment among dual-employed families.

Chapter 2

DUAL-EMPLOYED FAMILIES

One of the most significant social developments of the mid-twentieth century has been the entrance of married women into the labour force in significant numbers (McLean, 1979; Suchet & Barling, 1986). This has had a profound effect on the "traditional family" structure: a family pattern of breadwinner husband, homemaker wife and children, that has ceased to be the norm in modern Western society (Lewis & Cooper, 1989). Instead, the traditional family pattern now represents only one family arrangement in a society that includes growing numbers of dual-employed families, single parents, and adults who are child-free.

In the United States of America, statistics show that 40% of the work-force is comprised of dual-employed couples (Friedman, 1987), while in the United Kingdom the figure of 42% is presented (Lewis & Cooper, 1989). In South Africa, a lack of statistical data on dual-employed families exists, with information available only on working women per se. Specifically, the central statistics service (1987) places the number of working women (Black and White) at 32%. It follows naturally from this that many of these working women will be married.

Historically, contrary to expectation, the emergence o the dual-employed family is not a new phenomenon (Aldous, 1982; Measures, 1982; Zambrana, Hurst & Hite, 1979). As Rapoport and Rapoport (1982) observe, working wives have contributed to the economy from time immemorial. For example, prior to the Industrial Revolution, women's roles included numerous productive and managerial tasks within the home/work-place, as well as

caring for the family (Lewis & Cooper, 1989). Aldous (1982) suggests that the reason why the active breadwinner role of wives was overlooked, is because until the end of the last century women did not leave the geographical borders of their homes to earn money.

Following the Industrial Revolution, the place of production moved from home to factories (Lewis & Cooper, 1989). This brought about a change in emphasis from the employment of families to the employment of individuals, and brought about the segregation of work and family roles, usually according to gender (Zambrana et al., 1979). This family pattern was referred to as the traditional family model whose formation was strengthened by the growing belief that a non-working wife was a sign of wealth and prosperity, and that maternal absence was detrimental for healthy child development (Lewis & Cooper, 1989). Consequently, by the turn of the century most women were not members of the work-force. However, those who were were typically young, unmarried and of a lower class (Perun & Bielby, 1981).

In the first half of this century, a pattern of female employment was established that involved females working until marriage, where-upon they left the work-force permanently. This pattern remained only until post-war years as the characteristic pattern of the female labour force altered to include a return of older women to paid employment, as they became free of the demands of child-care (Zambrana et al., 1979). However, this pattern also changed in the 1960's, as young wives with young children began to enter the labour force at a greater rate than older women (Perun & Bielby, 1981). Consequently, as marriage proved to be no barrier to labour force participation by older women, so too does

the presence of young children at home not prevent large numbers of women from working today.

There are numerous reasons why women work (Puckrin, 1990). For example, Brehm (1989) notes economic factors, specifically, the reason of financial necessity and the subsequent improvement in standard of living. Campbell (1986) says that jobs can provide economic independence, while Sharpe (1984) emphasises the power that working women acquire when they are financially independent. Further reasons for female employment are reasons of personal preference, which includes working because of a need for self realisation, a sense of achievement, and self identity (Puckrin, 1990). In response to these employment reasons, women have begun to plan and pursue serious full-time careers (Stanfield, 1985). These women no longer feel compelled to make a choice between marriage and career, unlike their mothers and grandmothers who exhibited the alternating patterns of work and family roles. Rather, the female life course is now often composed of work and family cycles in simultaneous operation throughout adulthood (Perun & Bielby, 1981).

Defining Dual-Employed Families

The term dual-employed family denotes that both husband and wife have separate employment and family roles (Aldous, 1982). Employment refers to the performance of a task for which there is a financial reward (Barling, 1990). The employment of dual-employed families may not necessarily be permanent or meaningful, but merely signifies that productive effort is financially reimbursed (Rosen, Jerdee & Prestwich, 1975). Within this description, the family pattern referred to as the dual-career couple is included (Sund & Ostwald, 1985). The term

"dual-career couple" is similar to dual-employed families in that it denotes that both husband and wife have separate employment roles, but differs in that it refers to couples employed in occupations which are highly salient and require a high degree of commitment (Rosen et al, 1975). Also, the occupations of dual-career couples usually require special training and entail a regular sequence of related jobs in a hierarchy of prestige through which a person moves (Aldous, 1982). Barling (1990) notes that the term "dual-career couple" has become so widely used that it is in danger of losing its conceptual foundations. Barling (1990) adds that as there is a clear conceptual distinction between the two family types, the unquestioning use of the term "dual-career" should be avoided. Amiel (1985) distinguishes a career from a job by noting that a career requires a dedication to the labour force and a stream of energy outside that of regular working hours. However, Erwee (1991) notes that the definition of a career is currently being expanded to convey a broader meaning as an individual's work experiences need not be highly involving, upwardly mobile or professional to be considered a career. In view of this latest development, the term dual-employed family is purposefully selected so as to be broad enough to include all possible family arrangements in which both spouses have separate employment commitments. In fact, this term is used to simply refer to the family arrangement in which <u>both</u> partners have separate employment and family roles.

Research on dual-employed families has mainly focused on dual-career couples, as defined in the traditional sense (Sund & Ostwald, 1985). This research has largely been problem-centred and descriptive, focusing on either the special problems and conflicts of dual-career couples (e.g., Rapoport & Rapoport, 1969), or on role behaviours, such as division of

home tasks or career decision-making behaviours (e.g., Bailyn, 1970). Although the methodology of much of this research may be criticised for relying on case study designs (e.g., Rapoport & Rapoport, 1969), and small samples (e.g., Puckrin, 1990) that do not allow for causal inferences (Anastasi, 1982), this research has provided the basis for preliminary and exploratory examination of relationships between, and within, the work and family domains (Aldous, 1982). For example, from this research it has emerged that many of the findings of dual-career couples may not be generalised to other family arrangements (Barling, 1990). For instance, Amiel (1985) says that social prejudice may be greater against career rather than employed, non-career wives, and Avery-Clark (1986) reports that differences in aspects of the sexual relationship between partners, may depend on the extent of their "career" orientation. This suggests that there is a need for a broader and more detailed examination of dual-employed families, especially considering that dual-career couple research has documented the continuing importance of family roles, even among professional women, and the greater importance of family roles among men (Aldous, 1982; Lewis & Cooper, 1989).

Rapoport and Rapoport (1982) have suggested that a way to organise dual-employed family research is within the larger field of "work and family". The field of work and family emerged in the 1960's in opposition to previous research polarised by social scientists into work or family studies. This field holds the view that there is a challenging interface between work and family (Kanter, 1977), and that as the numbers of women, particularly married with children, enter the workplace it is no longer possible to preserve what Piotrkowski (1978) called the "myth of two worlds". Rather, this approach argues that the two worlds are linked, and what happens in one affects the other. Furthermore, the cross

influence is not only sporadic or confined to disturbance, but is also systematic, occurs on a wide scale and with both positive and negative elements. This is consistent with open-systems theory which says that an open-systems approach is essential to understand the link between work and family as such an approach permits an evaluation of unidirectional and reciprocal relationships between work, family and functioning, and includes other relevant variables outside that of the work and family domain, which impinge on the work/family relationship (Barling, 1990). Within this theory, four concepts are important, namely, inputs or imbalances in any system (e.g., job relocation or an ill-child), how the system transforms these inputs or events (e.g., coping behaviours), the subsequent outputs of the system (e.g., psychological health), and feedback of information about outputs to inputs (Barling, 1990). Also important is the idea that any event occurring within any one system, may exert a ripple effect on other systems (Katz & Kahn, 1978). Thus, for example, within the dual-employed family, having a s'ck child at home (the input) may result in the mother's or father's absence from work (the output), while the availability of on-site company child-care facilities may enable both parents to attend work in such instances. The availability of alternate child-care arrangements reflects the transformation factor. Barling (1990) says that an open-systems approach makes provision for numerous sub-systems within the work and family systems, for example, the marital and child-parent sub-system, and the worker-supervisor sub-system. Therefore, from an open-systems perspective it becomes clear that all individuals are members of several systems and sub-systems simultaneously, and that an integrative understanding of an individual's behaviour is best achieved by referring to the total context in which the behaviour is enacted (Barling, 1990).

The field of work and family is conceptualised as having three levels (Rapoport & Rapoport, 1982). Firstly, a macroscopic level, illustrated by the National Academy of Sciences Conference on Families and the Economy (Nelson, 1982). Secondly, a mesoscopic level, represented by studies of organisations in relation to, for example, maternity benefits or flexitime and other practices facilitating the opportunity for women and men with children to participate in the labour market (e.g., Lee, 1983). Thirdly, a microscopic level is identified which concerns how individual's manage the stressors they personally experience in balancing work and family demands (e.g., Barling, Fullagar & Marchl-Dingle, 1987; Barling & Rosenbaum, 1986; Skinner, 1982). It is within this latter level of analysis that the interest of this dissertation remains.

Work and Family Balance

It is widely acknowledged that the work/family balance is a pressing issue for dual-employed families (Lewis & Cooper, 1987). McCroskey (1982) attributes the rise of the work/family issue to three major changes that have affected the traditional family pattern. Firstly, there are not as many extended families as in the past, and few households have extended families living with them. Secondly, there has been an enormous increase in the number of single-parent families, and thirdly, many women, including wives and mothers, now work outside the home. Thus, the typical single breadwinner family is no longer typical at all, and in fact in the U.S.A. only 11% of households today fit this pattern (Friedman, 1987).

The changes in family life have made it more difficult for family members to maintain the traditional separations between work and family life (McCroskey, 1982). For generations, the home has been cared for by the

female family member, but now due to the full integration of women into the workforce, both husband and wife have to balance work and family roles, rather than separating them on the basis of gender (Friedman, 1987). In response to this, families are now redistributing family tasks to involve all family members more equally (McCroskey, 1982), and turning to employers for help (Schmidt & Scott, 1987).

The involvement of family members in family tasks is illustrated by research evidence which shows that men's work commitments are being affected by family needs (Hall, 1990). For example, Pleck (1985) notes the growing equity in the work loads of men and women at home and at work, and Rogers and Roge's (1989) say that men's reports of family-related problems have increased considerably. For example, Trost (1988) found that more than 70% of fathers under the age of 35 reported serious concerns about work and family conflict with their wives, and noted that these work and family concerns were affecting their careers.

The involvement of organisations in the work/family issue is revealed by research which shows that organisations are concerned about dual-employed family problems as their problems are expected to have an impact on recruiting, employee morale and productivity (Hall, 1990; Schmidt & Scott, 1987). Galinsky (1984) confirms this as employees who perceived their supervisors as unsupportive of family issues, reported higher levels of stress, greater absenteeism and lower job satisfaction. In contrast, Bond (1988) found that companies supportive of family issues were found to attract new employees more easily, reinstated female workers quicker after maternity leave, and benefited generally from higher workforce morale.

In view of the work/family balance being a pervasive issue, affecting family members and employers, the importance of studying the work and family domains is highlighted. Barling (1990) says an important reason for assessing the interaction between work and family life is the critical role that each fulfils in general psychological well-being. Indeed, as Freud (cf Aring, 1974) maintained, work and love is essential for mental health. However, maintaining a balance between work and family is seen as a major source of stress for dual-employed families (Rapoport & Rapoport, 1982). In fact, research suggests that dual-employed families may have stressors inherent in their lifestyle that are not present in traditional family arrangements (Sund & Ostwald, 1985). This, therefore, points to the need to explore the stress concept further and in particular, to address the issue of the stressors of the dual-employed family.

Summary

The entrance of women into the labour force in significant numbers has had a profound effect on the traditional family pattern (McCroskley, 1982). One effect has been the emergence of the dual-employed family, which is defined as a family arrangement in which both spouses have employment and family roles (Jerdee et al., 1975, McClean, 1979). The balance of work and family is seen as a serious concern for male and female dual-employed family members as well as a concern for organisations (Schmidt & Scott, 1987). In order to effectively understand the work/family balance an open-systems approach is advocated which recognises that each participant is a member of several systems and several sub-systems, and that any change in any one system will have a ripple effect, affecting all other systems (Katz & Kahn, 1978). It is

only within an open-systems conceptualisation of the work and family domains that an integrative understanding of the dual-employed family will be achieved (Barling, 1990).

Chapter 3

STRESS AND THE DUAL-EMPLOYED FAMILY

The Theory of Stress

The concept of stress originated from the word "stringere" which meant "to draw tight" and was first used in the fifteen century (Cox, 1978; Bluen, 1986). Within this era, the term stress was used to denote "hardships, straits, adversity or affliction," and was used predominantly in an engineering context (Shaffer, 1982). For example, the stress concept was used in conjunction with words such as load and strain: the word "load" was used to refer to an external force, the term "stress" was used to denote the ratio of the external force (created by the load) to the area on which the force acted, and the concept "strain" was used to refer to the deformation or distortion of the object (Lazarus & Folkman, 1984).

Contemporary use of the word stress may be defined according to three traditions (Burke & Weir, 1980). Firstly, stress may be defined according to a biological perspective based on research in physiology and endocrinology called the response-based approach (e.g., Selye, 1976; 1983). Secondly, stress may be described within a engineering analogy referred to as the stimulus-based approach (e.g., Dohrenwend & Dohrenwend, 1974), and thirdly, according to a psychological approach, known as the transactional model (e.g., Lazarus & Folkman, 1984). A closer examination of these contemporary definitions follows with a discussion of select examples.

Response-based Approach

Research which falls within a response-based approach to stress has as its primary aim the identification of general patterns of response to stress (Chesney & Rosenman, 1983). For example, Selye (1976; 1983) pointed to the consistent finding that in addition to any specific source-related response to a stressor, a non-specific reaction was also involved (Appley & Trumbull, 1986). On the basis of this observation, Selye proposed a theory of stress centred around the non-specific response to stress, calling it the General Adaptation Syndrome. This theory involves a three stage process regarding the effects of stress on the organism.

1. **Alarm reaction.** The first stage is the alarm reaction stage which concerns the organism's reaction when it is suddenly exposed to diverse stimuli to which it is not adapted. The term "alarm" is purposely selected for the organism's initial response as it is believed that the syndrome represents a general call to arm the body's defensive forces. Within this alarm reaction, two phases are identified, namely a shock phase and a counter-shock phase. As no organism can remain continuously in a state of alarm, continued exposure to a stressor becomes incompatible with life. But, if the organism survives the first stage then a second stage is necessarily entered into: a stage of resistance.

2. **Resistance.** The stage of resistance is the second stage of the General Adaptation Syndrome. Within this stage, the organism adapts to the demand, accompanied by consequent improvement or disappearance of alarm reaction symptoms. However, if the organism is exposed to

still ongoing demand, a third stage is entered into. Once this occurs, the resistance acquired during the second stage is lost.

3. **Exhaustion.** The third stage of the General Adaptation Syndrome is termed the stage of exhaustion: exhaustion arises if the stressor is sufficiently severe and prolonged (Selye, 1983). Indications of this stage are reappearances of alarm reaction symptoms, which may be fatal if the stressor continues unabated (Selye, 1983).

There are three implications of Selye's stress theory. The first is that stress consists of non-specific consequences to any stressor. Selye's use of the word "non-specific" is slightly confusing, however, what is meant is that every stressor produces certain reactions specific to that stressor, as well as non-specific changes that result from all stressors (Shaffer, 1982). The second implication of Selye's stress theory is that the effects of stress are involved in serious pathology (i.e "diseases of adaptation"), particularly when they overwhelm the organism's resources. Finally, the third implication of Selye's stress theory is that the effects of stress may be cumulative (i.e. over time) and additive (i.e. augmented).

Appraisal of Response-based Approach

Once a close examination of Selye's proposals and model occurred, the simple relationship and predicted chain of reaction tended not to be so simple or predictable at all. For example, Mason (1975) raised serious questions about the unitary, all-or-none nature of the physiological response as his research revealed that the relationship between physiological response and emotional arousal is specific. Secondly,

doubt has been expressed as to whether the physiological response of stress occurs in the absence of psychological conditions (e.g., Lazarus & Folkman, 1984). Rather, research suggests that psychological variables, for example, cognitive appraisal and coping, are influential in the stress process. Thirdly, Selye's stress model is said to be unclear about strescors which are not extreme or overwhelming, but periodic, occurring far enough apart so that the non-specific response returns to baseline (Singer & Davidson, 1986).

As a result, Selye's stress model is said to be an inadequate and inaccurate description of the stress process and deficient in some of its proposals. In short, Selye's model is criticised for being too inflexible to handle the complexity of interaction of factors found in all but the most extreme and overwhelming situations (Appley & Trumbull, 1986). Consequently, alternate explanations of stress have been sought in order to obtain a clearer understanding of the stress process. One such explanation is the stimulus-based approach.

Stimulus-based Approach

In keeping with psychological tradition, psychologists have adopted an approach to stress that defines it as a stimulus (Lazarus & Folkman, 1984). This is in line with psychological theory which portrays humans and animals as reactive to stimulation (Shaffer, 1982). Within this approach, stress stimuli are most commonly thought of as events impinging on a person (e.g., impending surgery or isolation), however, conditions arising within a person are not excluded (e.g., drive stimuli such as hunger or thirst) (Lazarus & Folkman, 1984).

An example of a stimulus-based approach to stress is the research area known as the study of life events (Bluen, 1986). This research area is said to operate within a stimulus-based framework as attention is directed at a class of environmental stimuli to which all humans are exposed to a greater or lesser extent. Such environmental stimuli are seen as stress-provoking and have been associated with physical, psychological and behavioural disorders (Cronkite & Moos, 1984). In explaining this association, it is argued that stressful life events represent changes which disrupt an individual's state of harmony, requiring adaptation or readjustment to return the individual to a new state of balance (Vinokur & Selzer, 1975). The extra effort expended during the adaptation process is believed to be a contributory factor to the deterioration of well-being as it drains the individual of resources (Cronkite & Moos, 1984).

Most of the stress research of the past three decades has adopted a stimulus-based definition of stress (Chalmers, 1981). The diversity of topics examined include the stress of war (e.g., Antonovsky, 1974), disaster studies (e.g., Chisholm, Kasl & Mueller, 1986), and the stress of illness (e.g., Cronkite & Moos, 1984). One area of stimulus-based research that is of particular relevance to the present dissertation is family stress (e.g., McCubbin, 1979), and occupational stress (e.g., Burke & Weir, 1980). Of particular interest is the stress of both marital partners having employment and family roles (e.g., Lewis & Cooper, 1989).

Appraisal of Stimulus-based Approach

A major criticism of stimulus-based approaches is the problem of quantifying the exact amount of stress present in any given threatening situation (Cox, 1978). Bluen (1986) argues that without a specified

calibration system, it is impossible to develop a stimulus-based definition, other than arbitrarily. Secondly, stimulus-based approaches do not allow for individual differences in the evaluation of events (Singer & Davidson, 1986). Thirdly, stimulus-based approaches imply that an undemanding stress-free way of life is desirable for all individuals, but this implication overlooks the positive role that stress plays and that moderate levels of tension and stimulation are essential for healthy functioning (Burns, 1988). Fourthly, the idea that life events lead to stress because an individual is intolerant of change is questioned (Pearlin, Lieberman, Menaghan & Mullan, 1981). Rather, it is noted that change in itself is not harmful to people and their health, but is an intrinsic part of normal biological and social life which is inescapably built into the ageing process and the life cycle (Pearlin et al., 1981). Consequently, it is believed that adverse effects of change depend not only on the number and magnitude of events, but also on the perceived impact of the change (e.g., Monroe, 1982).

However, perhaps the most significant criticism of life events research concerns the relationship reported between stressful life events and ill-health (Lin, Ensel, Simeone & Kuo, 1979). Although stressful life events have been associated with ill-health, a close examination of this relationship shows that the effect size is modest, with correlations typically centred around .30 (Kobasa, 1979; Vinokur & Selzer, 1975). This suggests that stressful life events may account for less then ten percent (10%) of the variance in illness prediction, and that many people pass through life stress unharmed (Martin & Lefcourt, 1983). Kessler, Price and Wortman (1985) say that current work is underway to extend the understanding of life events in a manner that may help account for this weak association. One important direction of this research is to improve

measurement by obtaining contextually specific information about events (e.g., Brown & Harris, 1978). For example, the emotional effects of job loss may differ considerably depending on the coping resources of the unemployed and the perceived impact of the situation (Kessler et al., 1985). This new direction is referred to as a moderator approach where a moderator is defined as a quantitative (e.g., sex and race) or qualitative variable (e.g., level of reward) that affects the direction and/or strength of a relationship between an independent and dependent variable (Baron & Kenny, 1986). With this new direction in mind, the transactional approach to stress is discussed, as this approach considers these factors (Singer & Davidson, 1986).

Transactional Theory

A transactional approach to stress represents an approach to stress which has the greatest acceptance in the contemporary stress literature (Appley & Trumbull, 1986). This approach is said to be transactional because stress is seen as the outcome of interactions between the organism and the environment (Singer & Davidson, 1986). The work of Lazarus and colleagues (e.g., Coyne, Aldwin & Lazarus, 1981; DeLongis, Coyne, Dakof, Folkman & Lazarus, 1982; Folkman, 1984; Folkman & Lazarus, 1980; 1985; 1988; Lazarus & Folkman, 1984) represents an example of this approach which maintains that stress is the observed stimulus-response relationship, not stimulus or response.

Lazarus and colleagues (e.g., Coyne et al., 1981; DeLongis et al., 1982; Folkman, 1984; Folkman & Lazarus, 1985; 1988; Lazarus & Folkman, 1984) have presented a theory of stress known as the Person-Environment Interaction Approach. This theory emphasises the relationship between

the person and the environment and takes into account characteristics of the person and the nature of the environment (Folkman, 1984). This approach is believed to parallel the modern medical concept of illness, as medical practitioners no longer see illness as being caused solely by external factors, but also due to an organism's susceptibility to disease (Fleming, Baum & Singer, 1984). Likewise, Lazarus and colleagues (e.g., Coyne et al., 1981; DeLongis et al., 1982; Folkman, 1984; Folkman & Lazarus, 1985; 1988; Lazarus & Folkman, 1984) argue that there is no objective way to predict stress without reference to the properties of a person. Therefore, they define stress as "a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 21).

The Person-Environment Interaction theory proposes that the judgement of a particular person-environment relationship as stressful depends on cognitive appraisal. Also, the ability of the organism to manage the internal and/or external demands appraised as taxing or exceeding resources depends on coping. These two processes, namely, (1) cognitive appraisal, and (2) coping, represent the two central, inter-related processes on which this theory of stress is based (Lazarus & Folkman, 1984; Singer & Davidson, 1986).

1. Cognitive Appraisal. Within the Person-Environment Interaction theory, cognitive appraisal is said to occur following exposure to a stressor. Two types of cognitive appraisal are identified, namely, primary and secondary appraisal. Primary appraisal concerns the appraisal of a stressor in terms of its ability to do harm, while secondary appraisal involves appraisal of the organism's ability to

manage the stress as well as a strategy most likely to prove effective in reducing potential harm (Lazarus & Folkman, 1984).

2. **Coping with stress.** Coping with stress is defined as managing external and/or internal demands that tax or exceed the resources of a person (Lazarus & Folkman, 1984). Two types of coping are distinguished according to the function that the coping behaviour serves, namely, problem- and emotion-focused coping (Lazarus & Folkman, 1984).

The relationship between cognitive appraisal and coping is described as dynamic and interdependent as both processes are believed to exert mutual influence upon one another throughout the stressful encounter. Consequently, designating cognitive appraisal as an antecedent and coping as a consequence is incorrect as designation depends on the point of time in which the ongoing transaction is interrupted (Folkman, 1984).

Appraisal of Transactional Theory

Transactional models of stress represent important contributions to the explanation of stress, especially as they consider human cognitive activities. In addition, transactional models enable researchers to explain a number of situations which are difficult to comprehend in response- and stimulus-based approaches (Singer & Davidson, 1986). For example, transactional models explain why it is that some individuals withstand stress under seemingly heavy loads, while other individuals escalate minor demands into stressful encounters. However, there are, like the response- and stimulus-based approaches, problems inherent in transactional models. Most important among these problems is that

transactional models raise a host of individual differences that response- and stimulus-based approaches do not consider (Lazarus & Folkman, 1984). For example, individual differences such as differing amounts of stress, differences in stress interpretations, differences in choice of coping behaviours, different stress circumstances, and individual differences arising from moderator variables (Singer & Davidson, 1986). The implication of these differences is that when having to consider all potential individual differences, researchers are presented with a formidable task (Coyne et al., 1981). A second criticism of transactional models is that traditional research techniques are unable to operationalise psychological processes (Bluen, 1986). Specifically, of the Person-Environment Interaction approach, it is difficult to measure the complete processes of cognitive appraisal and coping. In addition, methodological problems are encountered when assessing cognitive appraisal owing to the unknown degree to which cognitive appraisal is influenced by unconscious or impulsive appraisals (Bluen, 1986). Self-report, the method most often used to capture cognitive appraisal, is often inaccurate as it is a retrospective method of acquiring information (Coyne et al., 1981).

However, despite the problems of implementing appropriate person-environment stress research, the transactional approach to stress is the most widely accepted theory of stress accounting for more of the stress data than either the response- or stimulus-based approaches alone (Chalmers, 1981). Additionally, there is ample evidence of empirical support for the two central processes (i.e. cognitive appraisal and coping) on which the theory is based (e.g., Folkman & Lazarus, 1980; Frankenhaeuser, 1986). Thus, from a theoretical and empirical point of view, the transactional perspective of stress, and specifically, the

Person-Environment Interaction approach, is considered to be the most useful framework for understanding the stress process (Bluen, 1986). However, when adopting a Person-Environment Interaction approach it is mandatory that the concepts and procedures employed in a specific study be made explicit. In other words, the antecedent conditions used to induce stress, the response patterns measured as indices of stress, and the intervening processes believed responsible for the nature of the responses must be indicated (Lazarus & Folkman, 1984; Monat & Lazarus, 1977). This emphasises the need for greater specificity in stress research.

Specificity in Stress Research

A need for greater specificity in stress research was referred to as early as two decades ago when Lazarus and colleagues (e.g., Monat & Lazarus, 1977) made reference to the issue of generality versus specificity. For example, Monat & Lazarus (1977) in noting objections to Selye's (1976) stress theory, suggested that somatic illness depends on specific reactions to specific stressors and drew attention to three factors believed to influence the nature and severity of a stress response: (a) formal characteristics of environmental demands, (b) quality of individual emotional response, and (c) processes of coping mobilised by the stressful encounter. Since this early observation, the importance of the need for greater specificity in stress research has been noted. For example, Barling (1990) writes that greater specificity in stress research is essential for two reasons. First, different types of stressors have been shown to effect the duration and nature of strain in different ways. For example, daily hassles appear to have same-day effects on mood (e.g., Caspi, Bolger & Eckenrode, 1987), while chronic

stressors appear to have a more prolonged duration effect (e.g., Dew, Bromet & Schulberg, 1987). Also, acute stressors appear to have a different effect on the duration of strain as the effect is evident immediately, but most of the strain associated with the stressor disappears within a week (e.g., Barling, Bluen & Fain, 1987). Second, there is evidence that different coping strategies are used for different types of stress. For example, the use of social support as a coping strategy may only be effective in response to stressors that are chronic, as this type of stress allows sufficient time for the individual to elicit such support. Personality coping resources, in contrast, may be more suitable for managing daily or acute stressors, as the availability of a personality coping resource is immediate (e.g., Hobfall & Leiberman, 1987). The advantages of greater specificity in stress research are that it fragments research into more concise and manageable units, it allows for the investigation of moderator variables, and most importantly facilitates the design of programmes to prevent stress-related disorders (Singer & Davidson, 1986).

In recognition of the importance of specificity in stress research, the variables of the present research are specified. Firstly, stress is examined within a stressful life events approach, but a measure of the perceived degree of stressfulness is included. This is consistent with the idea that adverse effects of stress depend on the perceived impact of the stressor (e.g., Monroe, 1982). Secondly, the response patterns used as indices of strain cover the marital (i.e. marital communication and marital interaction), the occupational (i.e. job satisfaction and propensity to leave the organisation), and individual domains (i.e. general psychological health). This is in accordance with open-systems theory which argues that an individual is a member of many systems and

sub-systems (Barling, 1990). Thirdly, the intervening process or moderator variable is coping behaviours. Finally, this is examined within the context of the dual-employed family. Discussion now turns to a review of tho stressors of the dual-employed family where its noted that past research has primarily been conducted within a stimulus-based framework.

Stressors of the Dual-Employed Family

Many negative predictions have been made about the likely impact of participation in a dual-employed family on family members themselves and on the institution of marriage (Lewis & Cooper, 1989). For example, Parsons (1954) writes that once a dual-carear lifestyle is entered into, the wife becomes a destructive competitor with her husband. Furthermore, the employment of married women has been held responsible for the rising divorce rate (Lewis & Cooper, 1989), and the demands of the organisational structure have been depicted as being in competition with family roles. This suggests that stress and exhaustion are an inherent feature of dual-employed families (Skinner, 1982).

However, despite pessimistic appraisals, recent research has shown that although the dual-employed family has the potential to be stressful, the dual-employed family in itself does not contribute to negative consequences as this depends on circumstances within the family structure. For example, if spouses become adversaries instead of providing mutual support, a destructive, competitive marriage may well result. Also, the employment of wives is seen as only one of several factors contributing to divorce, and research findings on marital satisfaction among dual-employed spouses are conflicting (e.g., Axelson, 1963; Booth, 1977; Holahan & Gilbert, 1979; Yogev & Brett, 1985).

Furthermore, recent research notes that although the dual-employed family lifestyle may be characterised as stressful, advantages of the lifestyle are also acquired (Lewis & Cooper, 1989). For example, the many demands of both work and family roles without a supportive, full-time helper may be stressful, but both work and family roles provide an opportunity for many sources of satisfaction for husband and wife. In addition, the stress inherent in the dual-employed family lifestyle may not necessarily be greater than those of traditional families, but is of a different nature (Skinner, 1982).

Sources of stress for dual-employed families, and specifically dual-career families, have been conceptualised differently (Rapoport & Rapoport, 1978). For example, mention is made of concepts such as dilemmas, conflicts, strains, problems, and barriers illustrating a degree of variation in depicting dual-employed stress (Skinner, 1982). However, common patterns of sources of stress are evident, and in the review that follows, an adaptation of Skinner's (1982) delineation of stressors is used as an organising framework which is based on the work of Rapoport and Rapoport (e.g., 1969; 1976; 1978). Within this framework, stressors, although interactive and cyclical in nature, are classified as (1) internal stressors, and (2) external stressors (Skinner, 1982).

1. Internal Stressors

Internal stressors refer to sources of stress that arise from within the family (Skinner, 1982). A common source of these is work and role overload which occurs because both spouses are engaged in work and family roles, making the total volume of activities considerably increased over traditional families (Hall & Hall, 1980). For example, Rapoport and

Rapoport (1976) support the existence of role overload as a source of stress for dual-employed families, but found that the perception and the degree of role overload varied, depending on four factors: (a) the degree to which having children and a family life was salient, (b) the degree to which the couple aspired to a high standard of living, (c) the degree to which there was satisfactory reapportionment of tasks, and (d) the degree to which psychological overload compounded physical overload. Rapoport and Rapoport (1976) say that reapportionment of tasks was a coping strategy which helped alleviate role overload.

A second example of an internal stressor is what Rapoport and Rapoport (1978) refer to as identity issues. This stressor for dual-employed participants arises because of discontinuity between early gender role socialisation and current preferences and practices (Skinner, 1982). For example, Holmstrom (1973) says that the essence of "masculinity" in Western culture is centred on successful experiences in occupational roles, while the essence of "femininity" is acquired in the domestic domain. Consequently, the internalised view of the traditional male and female role is in conflict with the androgynous roles attempted by many dual-employed families. Puckrin (1990) observes that many South African females have a subservient attitude to their husbands which is in contradiction with what the dual-employed lifestyle ideally implies.

A third example of an internal stressor is the problem of role-cycling. This concept refers to attempts by dual-employed families to match or adjust individual job cycles with the cycle of the family and vice versa. Bebbington (1973) supports the existence of role-cycling as a source of stress and notes that many dual-career couples establish themselves in their careers before having children, and limit the size of their

families. This operates as a coping strategy for dual-employed families as it facilitates greater work/family balance and may operate as a career-facilitating strategy for dual-career couples (Skinner, 1982). A further coping strategy is identified by Rapoport and Rapoport (1978) who say that if dual-employed families disengage from one role before entering another, the impact of stress may be lessened. However, as many dual-employed families reject role-cycling within their work and family lives and choose three roles concurrently (i.e. worker, spouse and parent), these families have the most potential demands placed upon them (Puckrin, 1990).

Child-care and child-rearing is an additional internal stressor for dual-employed families. Unlike traditional families where the mother takes care of all child-related aspects, dual-employed families must seek alternate child-care arrangements (Stanfield, 1985). Many studies indicate that mothers of young children are particularly exposed to stress because of the demands made on them by small children (e.g., Greenhaus & Beutell, 1985). Added to this is the desire of mothers to be with their children during their formative years, and society's expectation that this should, in fact, be the case (Puckrin, 1990). A coping strategy related to this type of stress is identified by Skinner (1982) who notes that many dual-employed couples are opting for a child-free lifestyle.

Finally, the division of labour in household tasks is a further determinant of stress (Stanfield, 1985). Household management is a time-consuming task that must be accomplished for the home to operate smoothly and efficiently (Hall & Hall, 1980). Gunter and Gunter (1990) report that women perform more tasks than men, even when the male has an androgynous sex role orientation. In South Africa, the Markinor (1987)

survey reports that Black South African women are burdened by the Black cultural belief that men are the heads of the household and that women should attend to their needs. To cope with this type of stress the importance of a satisfactory reapportionment of tasks is noted as well as the employment of domestic assistance (Skinner, 1982).

2. External Stressors

External stressors refers to the stress that dual-employed families experience due to conflict between themselves and other societal structures (Rapoport & Rapoport, 1978). One example is the more frequently cited problem by dual-career professionals that fellow workers and friends expect the dual-career family to behave in the traditional family manner (Skinner, 1982).

A second external stressor arises for dual-employed families as they interact with the occupational structure. This includes the need for workers to be mobile, to relocate to different work sites, to work long hours, and the experience of prejudice and discrimination (Lewis & Cooper, 1989). South African research on mobility shows that Black South African men appear to be disapproving of their wives' travel commitments (e.g., James 1983), and South African research on discrimination shows that women in general, experience some form of discrimination in the workplace (e.g., Markinor, 1986; 1987).

Social network stressors constitute a further external stressor experienced by dual-employed couples (Rapoport & Rapoport, 1978). This stressor arises as maintaining relationships outside the immediate family is often a problem for dual-employed families. One reason for this is

overload which creates limitations on the availability of time to interact and socialise with friends and relatives (Lewis & Cooper, 1989). St. John-Parsons (1978) reports that most of the dual-employed families used the coping strategy of restricting social interactions.

The sources of stress delineated above suggest that dual-employed families are vulnerable to high levels of stress (Skinner, 1982). In fact, many studies have hypothesised that stress is a significant inherent feature of dual-employed families (e.g., Bebbington, 1973; Hall & Hall, 1980; Sund & Ostwald, 1985). As a result, research has focused on the consequences of this stress. For example, some research has focused on the physical and psychological short-term effects, such as depression, high blood pressure and general fatigue (e.g., Campbell, 1986; Cooper & Davidson, 1981), while others have focused on the marital relationship (e.g., Hiller & Philliber, 1982). Still others have focused on the effects of maternal employment on children (e.g., Harrel & Ridley, 1975), on available leisure time (e.g., Cooper & Davidson, 1982) and the development of personality characteristics (e.g., Holahan & Moos, 1985). This research supports the view that there is a spill-over between work and family life, and recognises that it is the family's perception of the stressful situation that is an important component influencing the impact of stress on the family (Skinner, 1982). For example, Bebbington (1973) says that many dual-employed families perceive their problems as having both positive and negative elements and often perceive a stressful situation more as routine than as unusual.

Although the research on dual-employed families has provided important insights into the dual-employed lifestyle, there are some areas in which this research may be criticised (Hall & Hall, 1980). For example,

employed mothers have been the focus of most of this research and the father's position has not often been included (e.g., Puckrin, 1990; Suchet & Barling, 1986; Stanfield, 1985). This represents a serious neglect as although many studies attest to the fact that women continue to do most of the family's domestic work (Sund & Ostwald, 1985), there is more recent research which establishes that there is a growing minority of men who do divide household chores equally (e.g., Lewis & Cooper, 1969). For example, child-care appears to be an area where there has been change as fathers are becoming increasingly involved in child-care, although this is often limited to the more pleasurable aspects such as playing with their children (e.g., Parke, 1981). Secondly, among the research on employed mothers, the majority of studies have focused on role conflict and overload and how this affects individual and family outcomes (Lewis & Cooper, 1989). Seldom has research focused on work attitude variables, and more seldom have both work and family outcome variables been incorporated in one study. Thirdly, most research has focused on dual-career families, a smaller sub-set of dual-employed families (Sund & Ostwald, 1985). There is a need to explore the wider set of dual-employed families since many of the findings obtained from dual-career family research may not be generalised to dual-employed families (Barling, 1990). Finally, moderator variables are often excluded which neglects to recognise that the adverse effects of stress depend not only on encountering stress, but also according to factors that modify its influence (Kessler et al., 1985). One variable that is believed to operate as a moderator is coping behaviours as coping is seen as an important factor that enables dual-employed families to manage the stressors of their lifestyle (e.g., Bebbington, 1973; Rapoport & Rapoport, 1976; 1978; Skinner, 1982). In particular, past research indicates that achieving a balance between the advantages and

disadvantages of the dual-employed lifestyle is the overriding concern of dual-employed family members (Skinner, 1982). Indeed, the aim of most dual-employed families is to plan how to cope with the employment and family roles of both partners so as to achieve an equitable balance between stressors and rewards (Rapoport & Rapoport, 1976).

Summary

This chapter reviewed the theory of stress, noting that contemporary use of the word may be defined according to (a) a response-based approach, (b) a stimulus-based approach, and (c) a transactional perspective. All three approaches were appraised and it was seen that a transactional approach to stress, and specifically the Person-Environment Interaction model (e.g., Lazarus & Folkman, 1984), is at present the most widely accepted theory of stress (Appley & Trumbull, 1986). The reason for this is that the Person-Environment Interaction approach takes into consideration human cognition and individual and contextual factors. However, the Person-Environment Interaction approach is not without limitations and in order to overcome this, it is important for researchers to specify the concepts and procedures employed in their research (Barling, 1990; Monat & Lazarus, 1977).

This chapter also reviewed the stressors of the dual-employed family. An organising framework was adopted which distinguished internal stressors (arising from within the family) from external stressors (arising from conflict with external structures) (Skinner, 1982). The research of dual-employed families was reported as deficient as (a) mothers have been more frequently investigated than fathers, (b) work attitude and family attitude variables have seldom been studied

simultaneously, and (c) dual-career couples have been the main focus as opposed to dual-employed families, and (d) moderator variables which may influence the nature and direction of the relationship between stress and strain, are often excluded.

Chapter 4

COPING AND THE DUAL-EMPLOYED FAMILY

The Theory of Coping

The concept of coping has been important in psychology for well over forty years as it has provided an organising theme in clinical descriptions and evaluations and is presently the focus of an array of psychotherapies aimed to improve stress management skills (Lazarus & Folkman, 1984). Scientifically, the concept of coping has captivated much interest, spurred by the repeated finding that stress, although consistently linked to ill-health, has played only a modest role in predicting illness onset and severity (Kessler et al., 1985). As a result, several attempts have been made to expand the stress-illness paradigm (Mitchell, Cronkite & Moos, 1983). One such attempt has been to focus on coping, a factor thought to protect the individual from the negative effects of stress (e.g., Aldwin & Revenson, 1987; Billings & Moos, 1981).

Traditionally, the concept of coping has been shaped mainly by two different bodies of research (Folkman & Lazarus, 1984). The first being the animal experimentation approach which defines coping as acts to control aversive environmental conditions in order to lower psychophysiological disturbance. Coping, within this perspective, is related to the concept of survival, which depends on the animal discovering what is predictable and controllable in the environment in order to avoid, escape or overcome threatening agents. In order to survive, the animal is depicted as dependent on its nervous system so as to make the correct survival-related decision (e.g., Ursin, 1980). The

second body of research which has influenced the concept of coping is psychoanalytic theory (Lazarus & Folkman, 1984). Within this perspective, coping is defined as realistic and flexible thoughts and acts that solve problems. The origins of these thoughts and acts are largely seen as unconscious responses to internal conflicts (e.g., Haan, 1977).

The animal experimentation and psychoanalytic approach to coping have been criticised (e.g., Billings & Moos, 1981; Lazarus & Folkman, 1984; Murphy, 1985). For example, the animal experimentation approach is seen as too simplistic and incomplete as cognitive-emotional factors are not included. Moreover, little can be learnt from this approach as the main theme is drive and arousal, while research is only concerned with avoidance and escape behaviours (Billings & Moos, 1981). The psychoanalytic model has similarly been criticised as this approach is limited to classifying people in order to make predictions of how they will cope with some or all types of stressful situations. The effect of this is that coping is viewed structurally as a style or trait, instead of as a dynamic process (Lazarus & Folkman, 1984).

However, despite these criticisms, contemporary approaches to coping have been influenced by both these approaches (Lazarus & Folkman, 1984). For example, from psychoanalytic theory, an approach to coping has been formulated that focuses on coping traits and styles (e.g., Fleishman, 1984). Also, as researchers have become increasingly interested in the impact of life events, attention has shifted to the process of coping with external stressors (Kessler et al., 1985). This shift in emphasis has predominantly been influenced by Lazarus and colleagues (e.g., Coyne et al., 1981; Folkman, 1984; Folkman & Lazarus, 1980; 1985; 1988; Lazarus & Folkman, 1984) who have focused on the role of cognitive appraisal in

influencing responses to stress and on describing coping in terms of a process. Contemporary approaches have also been shaped by social learning theorists (e.g., Bandura, 1977) who have emphasised the process of reciprocal interaction between the person and the environment, and by cognitive behaviour therapists (e.g., Meichenbaum, 1977) who have pointed to the role that cognitive processes play in therapeutic change. Contemporary formulations of coping emphasise the active role that individuals play in coping with stress, and realise that coping behaviours are complex and diverse (Billings & Moos, 1981). In the ··iew of contemporary approaches to coping that follows, discussion focuses on the traits and styles approach to coping (e.g., Fleishman, 1984), and on the approach that views coping as a process (e.g., Lazarus & Folkman, 1984).

Coping Traits and Styles

Coping traits and styles are personality characteristics that individuals draw on to help themselves overcome stressful situations (Pearlin & Schooler, 1982). These resources may be found within the self and are th··ht to act as barriers against the adverse effects of stress (Fleishman, 1984). A coping style differs from a trait primarily in degree, as the former refers to broad, pervasive, encompassing ways of relating to particular types of peopl. (e.g., powerful or powerless), or to particular types of situations (e.g., clear or ambiguous). Traits on the other han.., are regarded as properties of persons, and are usually narrower in scope (e.g., anger-in and anger-out). Generally, a coping traits and styles approach assumes that traits and styles predispose people to prefer certain types of coping behaviours, leading to a more or less consistent style of coping (Fleishman, 1984).

Appraisal of Coping Traits and Styles

Perhaps the most important criticism of a traits and styles approach to coping is that the argument presented is based on speculative reasoning. In fact, as Folkman, Lazarus, Gruen and DeLongis (1986) observe, there is little evidence that certain personality characteristics do significantly influence the coping process. Secondly, the argument that certain personalities use particular types of coping behaviours across a variety of situations is questioned (e.g., Cohen, 1987; Krohne, 1986). Instead, it has been shown that coping behaviours are not consistent across situations and in fact it seems incorrect to assume that individuals use the same coping behaviour in dealing with all aspects of one stressful encounter (Cohen, 1987). Thirdly, the traits and styles approach may be criticised for underestimating the complexity and variability of actual coping efforts. In particular, the unidimensional quality of most traits and style measures does not adequately reflect the multidimensional quality of coping processes used to deal with real-life situations (Lazarus & Folkman, 1984). To achieve this, a process-orientated approach to coping is advocated (Lazarus & Folkman, 1984).

Coping as a Process

A process approach to coping adopts the typical definition of coping as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person" (Lazarus & Folkman, 1984, p. 141). This definition is process-orientated, as opposed to trait-orientated, as concern is with what a person actually thinks or does in a specific

context, and with changes in these thoughts and actions across encounters as an encounter unfolds. The dynamics and change that characterise coping as a process are described as a function of continuous appraisals and re-appraisals of the altering person-environment relationship (Lazarus & Folkman, 1984).

Within a process orientation to coping, the important concepts of the functions of coping are raised (Krohne, 1986). The functions of coping differ from the outcomes of coping as the function of coping refers to the purpose a strategy serves, while the outcome refers to the effects of the strategy. Furthermore, the function of coping depends on the theoretical framework in which coping is conceptualised and on the context within which coping is examined (Lazarus & Folkman, 1984). A further distinction is made between coping behaviours that have a direct-action function and those that have a regulating emotion function (Krohne, 1986). The term problem-focused coping has been given to denote direct-action behaviours and are defined as cognitive and behavioural strategies used to remove or mitigate the sources of stress. To those coping behaviours that have a function of regulating emotion the term emotion-focused coping has been given and is defined as attempts to reduce psychological distress in order to help maintain emotional equilibrium (Aldwin & Revenson, 1987). Both forms of coping are believed to be used in every stressful encounter and may operate to facilitate or impede one another (Folkman, 1984). Empirical support for the division of coping into problem-focused and emotion-focused coping has been indicated (e.g., Coyne et al., 1981; Folkman & Lazarus, 1980).

Appraisal of Coping as a Process

Although a process approach to coping offers a comprehensive way of examining coping as it concerns what a person actually thinks or does within a specific context and how this changes over time, there are nevertheless certain problems within this approach. For example, the process-orientated assessment approach is presently in an early stage of development and is hampered by methods to assess changes in coping across time as an encounter unfolds (Rhode, Lewinsohn, Tilson & Seeley, 1990). Secondly, the division of coping behaviours into problem- and emotion-focused coping is criticised as the division constitutes a broad and general perspective that overlooks specific types of problem- and emotion-focused coping behaviours. As Aldwin and Revenson (1987) say, although providing a manageable division, it is important to look within the larger functions of coping to identify types and patterns of coping which people draw upon. However, to acknowledge all possible types of coping behaviours that people use to manage the many demands of everyday life, is a formidable task (Billings & Moos, 1981). Rather, it appears useful to make the distinction between coping resources and coping responses (e.g., Pearlin & Schooler, 1978; 1982).

Coping Resources

Coping resources refer to what is available to individuals in developing their coping repertoires (Pearlin & Schooler, 1982), an example of which is social resources. Pearlin and Schooler (1982) say that social resources are represented in the interpersonal network to which people belong and which offer a potential source of crucial support (e.g.,

family, friends, work colleagues, neighbours, and voluntary associations).

Empirical research has repeatedly shown that social support is an important environmental factor influencing general susceptibility to physical and mental disorder (Schradle & Dougher, 1985). For example, low social support has been associated with negative health outcomes such as anxiety, depression, irritation and somatic symptoms (e.g., LaRocco, House & French, 1980). However, the mechanisms by which social support operates to influence adjustment is unclear. For example, as Lazarus and Folkman (1984) say, "the empirical case for the importance of social relationships as a mediator of health outcomes still lacks definition of process and specification of the conditions under which health is affected" (p. 243). A major reason for this is that the social support literature has over simplified the role of social support in preventing adverse effects (Lazarus & Folkman, 1984). Secondly, questions have been raised as to whether social support does in fact reduce the negative consequences of stress as the association has been difficult to produce methodologically (Latack, 1986). Thirdly, social support has been defined and measured in different ways which has made it difficult to compare social support results (Schradle & Dougher, 1986). Finally, when measuring social support, some studies have made no distinction between the number of relationships a person has and the perception of the value of social interactions. This represents a serious flaw since findings show that the quality of a social relationship is more important than the number of associations (Billings & Moos, 1981). The implication of these issues is that when analysing social support as a coping resource it must be realised that social support is a complicated variable and that past research has been hampered by difficulties (Lazarus & Folkman, 1984).

Coping Responses

In addition to coping resources there are coping responses which refer to specific coping behaviours, cognitions and perceptions that people use when contending with life problems (Pearlin & Schooler, 1982). In other words, coping responses represent the things people actually do, as opposed to those things that are potentially available to them. Although coping responses are conceptually and empirically distinguished from coping resources, they may quite likely be influenced by each other (Burke & Weir, 1980).

A number of attempts have been made to classify coping responses into conceptual domains, however, considering the complexity and diversity of environmental stressors, it is no surprise that a uniform typology of coping responses has yet to be achieved (Billings & Moos, 1981; Fleishman, 1984). Although no typology is generally agreed upon, three dimensions of coping common to most of them include (a) direct action on environment or self, (b) interpretive re-appraisal regarding environment or self, and (c) emotion management (Menaghan & Merves, 1984).

The present study adopts a resources and responses approach to coping. Specifically, the coping resources and responses of dual-employed families are examined. Within this context, the function of the coping resources and responses refer to attempts to manage work and family demands. Coping resources are captured by a constellation of coping behaviours referred to as the procurement of support, while coping responses are assessed by three coping patterns, (a) maintaining,

strengthening and restructuring the family system, (b) modifying conditions of the work/family interface, and (c) perceptually controlling the meaning of the lifestyle and managing strain. The larger functions of problem- and emotion-focused coping are clearly discernible.

Appraisal of Coping Resources and Coping Responses

The coping resources and responses approach to coping represents a realistic and manageable approach to adopt (Aldwin & Revenson, 1987). However, there are two problems associated with this approach. First, this approach, like most current conceptualisations of coping behaviours, overlooks coping behaviours that are unconscious and not deliberate as these coping behaviours require indirect assessments. Second, it is difficult to make a clear conceptual distinction between coping resources and responses and symptoms of psychological ill-health (Kessler et al., 1985). For example, Kessler et al. (1985) ay "at what point does heavy drinking change from a coping strategy for tension reduction to a symptom?" (p. 552). However, as the present study only focuses on adaptive coping behaviours, and as the coping behaviours are clearly separated from the strain indicators, this problem is addressed.

Having reviewed the theory of coping, coping is now discussed in relation to the dual-employed family. Here it is noted that past research has generally been descriptive (Skinner, 1982) and, therefore, the mechanism by which coping operates to attenuate the effects of dual-employed family stress has not adequately been addressed (Skinner, 1983). General research on coping has proposed that coping operates to attenuate the negative impact of stress through two effects (Aldwin & Revenson, 1987). The first is a main effect which is a uniform effect of coping on strain,

regardless of the nature, or degree, of stress faced (Wheaton, 1983). The second is the moderator effect which is the effect of coping on strain that depends on the nature and degree of stress encountered (Wheaton, 1983). Conclusions from general research are unclear on which model is operative as the effects have been difficult to produce methodologically (Aldwin & Revenson, 1987). For example, several studies report only main effects (e.g., Felton & Revenson, 1984; Felton, Revenson & Hinrichsen, 1984; Shinn, Rosario, Morch & Chestnut, 1984), while others show evidence of a moderator effect (e.g., Martin & Lefcourt, 1983; Mitchell et al., 1983). Clearly, the mechanism by which coping operates in the relationship between stress and strain remains unclear and, therefore, will be assessed.

Coping Strategies of the Dual-Employed Family

Previous research on the stressors of the dual-employed family has proposed that the occurrence of adverse consequences depends to some extent on the coping strategies of the family (Lewis & Cooper, 1983). Coping strategies may be delineated into coping behaviours that: (1) operate from within the family system, and (2) coping behaviours that arise from the interaction with external support systems. This classification system corresponds to the delineation of stressors as identified by Skinner (1982) as the distinction between internal stressors (i.e. conflict from within the family) and external stressors (i.e. conflict with external structures) was made.

1. Coping behaviours from within the dual-employed family system

The dual-employed family has the potential to lead a successful and satisfying lifestyle but, to achieve this, various coping strategies from within the family must be relied upon (Skinner, 1982). This includes a supportive spouse relationship, where the most meaningful manner of showing support is by sharing traditionally defined roles. Cooper and Davidson (1981) say that role-sharing deals with shifts in the distribution of home responsibilities: responsibilities that were previously the wife's must be shared between partners.

A second coping behaviour identified from within the dual-employed family is effective time management as dual-employed families require highly organised schedules and need to utilise their time effectively. One such method is compromise, although more commonly reported by women (e.g., Puckrin, 1990), this is not limited to female dual-employed members. For example, Skinner (1982) reports that men often compromise advancement opportunities in an attempt to reduce role conflict. Compromise as a coping strategy is not limited to managing conflicts between roles but also to deal with competing demands within roles (Skinner, 1982). For example, domestic overload may be managed by purposefully lowering standards as constraints of time and energy make ideal household standards difficult to attain.

Finally, following healthy practices and creating leisure time is a further coping strategy used within the dual-employed family (Hall & Hall, 1980). Time constraints are common to the dual-employed family with the inevitable sacrifice of personal leisure time in order to attend to work or family commitments (Cooper & Davidson, 1983). Lee (1981) cautions

against the harmful effects of "all work and no play," while Lewis and Cooper (1989) identify coping strategies that dual-employed families may use to enhance health and create leisure time, for example, exercise, meditation, enrolling at a club or community group and taking a vacation.

2. Coping behaviours in conjunction with external support structures.

Dual-employed families have also been found to employ coping strategies aimed at securing support from outside the family to help maintain a work/family balance (Skinner, 1982). The most common type of help sought is child-care (e.g., Sund & Ostwald, 1985), but other forms of assistance such as domestic help and the acquisition of time saving devices (e.g., microwave oven) are also employed (Green & Zenisek, 1983).

Outside support in terms of friendship is further identified as an important external means of coping (Skinner, 1982). For example, Rapoport and Rapoport (1978) found that dual-career couples formed friendships on a couple basis, socialising with other couples who were in similar situations. The formation of friendships with others in similar situations serves to help validate the dual-employed life-style, provides a recreational function, and provides a reciprocal support structure (Skinner, 1982).

Finally, many dual-employed couples are attempting to negotiate work arrangements that will help reduce or resolve some of the stress of this family pattern (Skinner, 1982). Lewis and Cooper (1989) say that as mothers now constitute a sizeable proportion of the workforce, and as fathers can no longer be assumed to have full-time wives to care for them and their children, organisations must respond to alleviate some of the

pressures their employees are experiencing. However, assumptions about the effectiveness of organisational policies should not be made without empirical evaluation (Lewis & Cooper, 1983). For example, a study of the consequences of introducing flexitime for American government employees revealed no reduction in stress for working mothers, unless it was accompanied by a change in sex-role attitudes, as mothers were merely able to accomplish more of their normal activities (Bohen & Viveros-Long, 1981).

South African research on the coping methods of dual-employed families supports the use of coping behaviours from within the family system and coping behaviours in conjunction with external sources. Examples of coping behaviours from within the family are provided by Puckrin (1990) who found that dual-career women adhered to organised schedules and were conscious of how their time was allocated. Flexibility and control was valued highly in attempting to meet overload and time pressures. Examples of coping behaviours in conjunction with external sources include the use of domestic assistance by dual-employed families as well as the use of child-care facilities (Markinor, 1987). Also, socialising appears to be an external coping strategy, for example, Erwee (1987) says that networking groups are emerging in South Africa and notes that such groups offer seminars, regular meetings, individual counselling, newsletters etc. Finally, many South Africans are establishing their own businesses as a means to cope with the demands of both work and family. Besides the motivating reasons of challenge and financial benefits, the establishment of an "own business" enables families to acquire greater flexibility and to meet the demands of the work/family balance (Puckrin, 1990). This is reflected in Erwee's (1987) research as the majority of entrepreneurs

interviewed were married (73%) as opposed to being divorced (12%), single (8%) or widowed (7%).

Rationale for the Study of Dual-Employed Family Coping Methods

Dual-employed families are an important component of the South African labour force and organisations are realising their importance. In fact, many organisations are investigating their relevance to companies as they are aware that dual-employed family members often occupy skilled manpower positions (Erwee, 1991). Indeed, as Puckrin (1990) observes, many married women are increasingly entering traditionally male-dominated high-level professions. As more and more women enter the workforce they bring with them more overt family responsibilities and needs (Hallett, 1987). This together with a major skills shortage predicted for South Africa (e.g., Bryant, 1990) where organisations will need to implement policies which will allow them to attract dual-employed family members, clearly shows that the dual-employed family in itself is an important social development that requires detailed investigation.

A distinguishing problem of the dual-employed family is that the lifestyle may be characterised as stressful. Indeed, the literature on dual-employed families is dominated by terms such as dilemmas, barriers, conflicts, problems and stressors (Skinner, 1982). The main problems for dual-employed families appear to be the work/family balance as both partners engage in separate work and family roles, and the problem of re-negotiating rules and policies that were designed for the traditional family pattern. As Gilbert (1985) says, with the disappearance of the once true societal norm that a woman's place is in the home, pressure is being applied for more equitable roles for men and women. Although equity

is presently been sought, the acceptance of these changing norms has been slow to occur with the result that dual-employed families may face tremendous internal and external stressors (Hall, 1990).

Research on the internal and external stressors of the dual-employed lifestyle has tended to be descriptive, operating within a stimulus-based approach (Hall & Hall, 1980). Within this approach, a life events framework has commonly been adopted where attention has been directed to the class of environmental stimuli that dual-employed families are commonly exposed (e.g., Lewis & Cooper, 1987; 1989; Sund & Ostwald, 1985; Sekaran, 1983; Rapoport & Rapoport, 1978). Aldous (982) says that the descriptive nature of this research is not surprising, given that the dual-employed family is a relatively new phenomenon. In fact, it is only through a descriptive approach that the potential stressors associated with the lifestyle can be confirmed, and important research questions can be delineated (Turton, 1986). Therefore, qualitative research on dual-employed families is advocated and which forms part of the present research as an open-ended question on the stress of the dual-employed family is included. The information obtained from this question is analysed in order to provide qualitative information on the types of stressors facing dual-employed families.

In addition to characterising the dual-employed family pattern as potentially stressful, it has been said that the use of coping behaviours is an important predictor of adverse stress consequences (e.g., Cooper & Davidson, 1983, Hall, 1972; Lewis & Cooper, 1989; Puckrin, 1990). However, confirmation of this has not been adequate, even within general research on coping (Aldwin & Revenson, 1987). As a result, the present research focuses on dual-employed family coping behaviours and the

mechanism by which coping is believed to influence adjustment is tested. Specifically, a main effect and moderator model is assessed. A main effect argues that coping behaviours have a uniform effect on adjustment, regardless of the nature, or degree, of stress faced. In comparison, a moderator effect states that coping behaviours moderate the impact of stress depending on the type or degree of stress encountered (Wheaton, 1982; 1983).

Besides addressing the mechanism through which coping affects adjustment, the present study addresses a number of limitations of past research. Firstly, separate statistical analyses are conducted of the perceived stressfulness of events according to the different categories of stress identified through content analysis. This is in line with the need to specify variables in stress research as it has been shown that the effects of stress on strain differ across different types of stress, and that the effectiveness of coping behaviours depends specifically on the type of stress faced (Barling, 1990). Secondly, attention moves beyond focusing on the dual-career family to include the dual-employed family and specifically concerns the coping attempts of married persons to combine employment and family roles. Within this context, males are also included and thus this research represents a move away from a previous preoccupation with employed women (e.g., Paloma, 1972; Puckrin, 1990; St. John-Parsons, 1978; Starfield, 1985). The inclusion of male dual-employed members is consistent with findings which show that males are experiencing conflict between work and family roles (e.g., Pleck, 1985), and are attempting to become more involved in family matters (e.g., Lewis & Cooper, 1989). Finally, indices of strain are included which represent the family (i.e. marital communication and marital interaction), work (i.e. job satisfaction and propensity to leave the

organisation), and personal domains (i.e. psychological health). This approach is in line with open-systems theory which argues that a comprehensive understanding of the work and family environments can only be attained by realising that an individual is a member of many systems and sub-systems (Barling, 1990).

Summary

This chapter reviewed the concept and theory of coping and it was noted that traditionally the concept has been shaped by the animal experimentation approach and psychoanalytic theory (Kessler et al., 1985; Lazarus & Folkman, 1984). Two examples of contemporary approaches to coping were reviewed, namely the traits and styles approach and the approach that views coping as a process. Within this latter perspective, coping resources were distinguished from coping responses and were identified as the focus of the present research. Specifically, the coping resources and responses of dual-employed family members is the concern of this study.

The coping strategies of dual-employed families were also reviewed. Here it was noted that past research has primarily been descriptive (e.g., Hall, 1972). Within-family coping methods were distinguished from coping behaviours used in conjunction with external structures which was consistent with the description of stressors facing dual-employed families (e.g., Skinner, 1982). A rationale for focusing on the coping behaviours of dual-employed families was presented where it was noted that dual-employed families are an important social development. The main aim of the research was offered as providing statistical confirmation of the use of coping in attenuating adverse effects within a main effects and

moderator model. Improvements on previous research were noted and include (a) separate statistical analyses for the perceived stressfulness of the types of dual-employed family stress, (b) a focus on dual-employed members as opposed to dual-career family members, (c) the inclusion of male and female dual-employed family members, (d) a descriptive account of the stressors of the dual-employed family and a measure of the perceived stressfulness of each stressor, and (e) the inclusion of strain indicators from the family, work and personal environments.

Chapter 5

METHOD

Subjects

The sample used in this study consisted of male and female members of dual-employed families. Generally, only one partner of the dual-employed couple was assessed as the present research did not require that both partners be employed in the same organisation, but only that they should be employed. However, some responses were received from married couples who were employed in the same organisation. Two conditions had to be met for a subject to be included in the sample. Firstly, the subject had to be presently married, and secondly, the subject and his or her spouse had to be employed in a full-time capacity. Dual-employed subjects were employed in one of two nation-wide organisations in which the questionnaires were distributed, namely, a mining house and a oil/petrol company. Only White-collar workers received questionnaires as permission to distribute questionnaires among blue-collar workers was not granted.

Approximately 350 questionnaires were distributed of which 143 were returned, representing a response rate of 40%. However, because 15 questionnaires were either incomplete or inaccurately completed, only 128 questionnaires were included in the final analysis. Thus, the final response rate was 37%.

Subjects were requested to provide certain biographical details during completion of the questionnaire. This biographical information concerned questions relating to age, sex, education, length of marriage, number of

children, and position in organisation. Table 1 presents the demographic details of the final sample.

Table 1

Demographic Details of Final Sample

	N	M	SD	Range
Age	128	34	9.6	20-59
Years of Education	128	13.5	2.9	10-18
Number of children	128	1.3	1.15	0-5
Length of marriage (in years)	128	10.7	9.1	1-35
Sex				
male	49			
female	79			
Race*				
White	125			
missing	3			
Home language				
English	58			
Afrikaans	65			
other	4			
Position in organisation				
managerial	17			
skilled	56			
semi-skilled	52			
missing	3			

*No Indian, Coloured or Black responses were returned.

Experimental Design

The aim of the present study was to explore the nature of coping in the relationship between dual-employed family stress and adjustment in the

family and work domains. In view of this, a correlational design using a single sample group with no repeated measures was seen as appropriate. This design constitutes a cross-sectional approach as subjects were required to provide information on different aspects of their life at one time, but is also retrospective as subjects were asked to recall certain happenings of their life. As a correlational design was used, the variables included were designated the roles of "dependent", "independent" and "moderator" variables purely on the basis of theoretical evidence. In particular, five variables were designated the role of "dependent" variable, namely (1) job satisfaction, (2) propensity to leave the organisation, (3) marital communication, (4) marital interaction, and (5) psychological well-being. Designated the role of "independent" variable was the perception of dual-employed family stress, of which seven types emerged from initial content analysis, namely, (1) occupational stress, (2) domestic chore stress, (3) child-care problems, (4) role overload, (5) marital difficulties, (6) financial stress, and (7) an open category, including the stress of ill-health, pregnancy and study commitments. The variable designated "moderator" variable was dual-employed family coping. The analysis of these variables was limited to an examination of correlational relations and no causal inferences concerning stress, coping and adjustment could be made. However, given that the study of coping is a relatively new area of research of which so little is known (Lewis & Cooper, 1989; Menaghen, 1983; Pearlin et al., 1981), a cross-sectional, retrospective design was viewed as appropriate as it has the ability to provide the basis for a preliminary, exploratory examination of relationships within, and between, the work and family domains. Also, this design is appropriate for assessing main and moderator effects as was the purpose of the study (Suchet & Barling, 1986).

Procedure

A questionnaire of the relevant scales was compiled and distributed to male and female members of dual-employed families who were employed at one of two nation-wide organisations. Before distribution, permission for implementation of the study was requested from management of each organisation concerned. A covering letter appeared on the questionnaire which noted that management had endorsed the project, but informed subjects that management would not have access to individual results. Also, the contents of the covering letter made emphasis of the anonymity of the questionnaire and provided an assurance of confidentiality of responses. The covering letter also explained the nature of the research and that it was an academic project. A contact name and address was supplied allowing subjects the opportunity to find out more about the research. After completion of the questionnaire, subjects were requested to mail it to the University in the prepaid envelope provided. A copy of the questionnaire is included in Appendix 1.

Measuring Instruments

Seven scales were included in the questionnaire. Below follows a separate discussion of each.

"Dependent Variables"

1. **Job Satisfaction.** The Overall Job Satisfaction Scale (Warr, Cook & Wall, 1979) was included as a measure of job satisfaction. This scale has sixteen items designed to measure satisfaction with intrinsic and extrinsic features of the job. The first fifteen items deal with aspects

of work (e.g., hours of work, physical work commitments), while the final item deals with the respondent's overall satisfaction with his/her job. The original scale employs a seven-point Likert format, ranging from "I'm extremely dissatisfied" (1), to "I'm extremely satisfied" (7). In the present study, a three-point Likert format was employed of "I am unhappy" (1), "I am not sure" (2),"I am happy" (3). This format was adopted for reasons of ease of response (Morris & van der Reiss, 1980), and follows the precedent of past South African research (e.g., Bluen, 1986).

Warr et al. (1979) report that the Overall Job Satisfaction Scale was developed on the basis of an extensive literature review, a pilot study and two investigations with a sample of male blue-collar workers. They report acceptable internal homogeneity (α = .78) and test-retest reliability over a six month period (α = .63). Moreover, Warr et al. (1979) report that the Overall Job Satisfaction scale correlated significantly ($p < .001$) and in the predicted direction, with measures of intrinsic job motivation (r = .35), work involvement (r = .30), life satisfaction (r = 42), happiness (r = .49), and self rated anxiety (r = -.24), thereby providing satisfactory evidence of validity. When used on a South African sample, Bluen (1986) reports acceptable internal homogeneity (α = .95) and a significant test-retest reliability coefficient ($r = .63$, $p < .001$). In the present study, the Overall Job Satisfaction Scale's reliability was confirmed (standardised alpha = .84) (see Chapter 6; Table 7).

2. **Propensity to Leave the Organisation.** The Propensity to Leave Scale (Lyons, 1971) is a three-item scale designed to measure withdrawal behaviour. Unlike the other measures included in this study, the Propensity to Leave Scale is not an attitudinal scale but measures an

intention to behave. The three items included in the scale refer to: (a) how long subjects would like to stay employed in their present place of work, (b) whether subjects would continue working in the organisation, given freedom of choice, and (c) whether they would return to the organisation if they had to leave for some reason for a period of time (e.g., due to ill-health). From this it becomes clear that the Propensity to Leave Scale assesses the potential of a subject to stay, as opposed to the potential of a subject to leave. The original format of the scale makes use of a five-point Likert scale, but for ease of response (Morris & van der Reiss, 1980), and in accordance with past research (e.g., Bluen, 1986), a three-point Likert format was used for the first two items. Specifically, for these two items the format ranged from "no" (1), through "not sure" (2), to "yes" (3). For the final item, a six-point Likert format was used ranging from "one year" (1) to "more than 10 years" (6) in order to maximise the response range (Bluen, 1986).

The original format of the Propensity to Leave Scale makes reference to the word "hospital" as the original intention of the scale was to assess the propensity of nurses to leave their place of employment. When using the scale in an organisational context, Rousseau (1978) modified the item wording by replacing the word "hospital" with "organisation". As the Propensity to Leave Scale was administered within an organisational context, items were modified in a similar manner.

Psychometric properties of the Propensity to Leave Scale have been indicated by Lyons (1971) who reports a Spearman Brown internal reliability coefficient of .81. Bluen (1986) reports .77 (coefficient α) on a South African sample. In the present study, internal reliability

was confirmed as a standardised alpha of .70 was obtained (see Chapter 6; Table 7).

Construct validity of the Propensity to Leave Scale has been indicated. For example, Lyons (1971) reports a Pearson correlation coefficient of -.27 with a measure of role clarity, and Brief and Aldag (1976) report significant correlations with a scale of role ambiguity (r = .25), and role conflict (r = .23). The above reported correlations were all obtained with samples of nursing employees, but satisfactory psychometric properties have also been demonstrated with samples of organisational employees (e.g., Rousseau 1978).

3 **Marital Communication.** Marital communication, one indicator of marital adjustment (Kahn, 1970; Murphy & Mendalson, 1973), was assessed by the Primary Communication Inventory (Navran, 1967). This scale is a 25-item scale originally developed by Locke, Sabagh and Thomas (1956) and later modified by Navran (1967). The Primary Communication Inventory is an interpersonal measure based on perceived quality of communication between husband and wife. Navran (1967) reports that the Primary Communication Inventory contains two sub-scales, namely, (a) a non-verbal communication scale, and (b) a verbal communication scale, however, this claim has been disputed. Specifically, Beach and Arias (1986) contend that the scale contains (a) a measure of the individual's perception of own communication ability, and (b) a measure of spouses perception's of the individual's ability. As they say that this latest distinction in no way invalidates the scale as a measure of overall marital communication ability, the scale was included. The original five-point Likert response format ranging from "never" (1) to "very frequently" (5), was used.

Psychometric properties of the Primary Communication Inventory have been indicated. For example, Navran (1967) says that the Primary Communication Inventory displayed acceptable reliability properties. Also, Suchet and Barling (1986) and Rosenfield (1987) report that the scale demonstrated acceptable psychometric properties on a South African sample. In the present study internal reliability was confirmed (standardised alpha = .87) (see Chapter 6; Table 7).

Navran (1967) reports that the Primary Communication Inventory correlated significantly ($p < .001$) and in the predicted direction, with a global measure of marital adjustment ($r = .82$). Similarly, Locke et al. (1956) report significant correlations between the original Primary Communication Inventory and different marital adjustment measures ($r = .36$ - $r = .72$). Finally, Kahn (1970) reports a significant correlation with a behavioural measure of marital non-verbal communication ($r = .61$) for unhappily married couples and a non-significant correlation ($r = -.35$) for a maritally satisfied group. A correlation of .26 was obtained for the combined groups, giving evidence of validity ($p < .001$; Kahn, 1970).

4. **Marital Interaction.** Marital interaction was assessed by twenty items taken from the Daily Checklist of Marital Activities (Wills, Weiss & Patterson, 1974). The Daily Checklist of Marital Activities is a scale consisting of 109 items assessing frequency of interaction between spouses. The scale is administered every day for a period of seven days where spouses are required to indicate the frequency of marital interaction on a 5-point Likert format ranging from "never" (1) to "very frequently" (5). As the present study was cross-sectional where subjects were required to provide information on different aspects of their lives at one point in time, the Daily Checklist of Marital Activities was viewed

as inappropriate. Consequently, the 20 items previously selec'ed by Kruger (1987) and implemented with a South African sample, were included as a measure of marital interaction.

Kruger (1987) reports that the twenty marital interaction items revealed satisfactory reliability: standardised alpha = .89 and Spearman-Brown Split-Half = .90. Also, Kruger (1987) indicates that the validity of the scale is suggested by the significant relationship found between marital interaction and marital adjustment ($r\ (126) = .70$, $p < .0001$) as assessed by the Short Marital Adjustment Test (Locke & Wallace, 1959), and marital commitment ($r\ (122) = .35$, $p < .0001$), as measured by the Broderick Commitment Scale (Broderick, 1981). In the present study, a significant Pearson correlation coefficient, in the predicted direction, was obtained between the twenty marital interaction items and marital communication ($r = .66$, $p < .0001$), as assessed by the Primary Communication Inventory (Navran, 1967). Also, internal reliability was confirmed (Standardised alpha = .89) (see chapter 6; Table 7).

5. **Psychological Well-being.** The General Health Questionnaire (Goldberg, 1972) is a self-administered screening test for assessing minor psychiatric disorders in community settings such as primary care or general medical outpatients. The questionnaire is said to be objective in the sense that it does not require the person administering the scale to make subjective assessments about the respondent (Banks, Clegg, Jackson, Kemp, Stafford & Wall, 1980). Also, the focus of the questionnaire is on psychological components of ill-health where subjects compare their present psychological state to their usual psychological state. In this way, the questionnaire focuses on symptoms as opposed to traits (Goldberg, 1972).

The original form of the General Health Questionnaire consists of sixty items. From these, Goldberg (1972) has identified the "best" thirty, twenty and twelve items to be administered in situations where respondent's time is at a premium. The General Health Questionnaire-12 was the version used in the present study where each item consists of a question enquiring whether the respondent has recently experienced a particular symptom or item of behaviour on a scale ranging from "less than usual" (1), to "much more than usual" (4). Goldberg (1972) argues that this response range avoids errors due to overall agreement common to bimodal response scales and the "error of c al tendency" is eliminated by having an even number of response categories. Goldberg (1972) further suggests two scoring procedures. Firstly, the General Health Questionnaire-method where subjects score 0 if acknowledging either the first or second category or 1 if either the third or fourth category is endorsed. Secondly, a Likert-method of scoring is suggested where respondents are given scores of 1 - 4 for the respective categories. The latter procedure was adopted within the present study as it has been shown that the Likert-method provides a more acceptable distribution of scores in parametric analysis (e.g., Banks et al., 1980). Also, this method of scoring was used to overcome the potential problem associated with a truncated range (Bluen, 1986). Goldberg (1972) reports that for both scoring procedures comparable reliability and validity characteristics were obtained.

Psychometric properties of the General Health Questionnaire are indicated by Goldberg (1972) who reports that the scale exhibits satisfactory test-retest reliability over a period of six months and acceptable split-half reliability. Also, the scale has been shown to correlate significantly, in the predicted direction, with clinical assessments

(e.g., Goldberg & Blackwell 1970), and has been validated against established measures of psychological symptoms, for example, the Clinical Interview Schedule (Goldberg, Cooper, Eastwood, Kedward & Shepherd, 1970).

As the General Health Questionnaire had demonstrated satisfactory and consistent psychometric properties in clinical settings, Banks et al. (1980) undertook an investigation of the scale's utility within an organisational context. They found that the General Health Questionnaire-12 exhibited similar properties. Specifically, when administered to three samples (employees, school leavers and unemployed men) satisfactory alpha coefficients of between .82 and .90 were recorded. Additionally, the General Health Questionnaire-12 was found to be sensitive to sex differences and employment status, while unrelated to age, job level and marital status (Banks et al., 1980). Within a South African organisational context, Bluen (1986) reports acceptable internal consistency of .91 (Cronbach's alpha time one) and .93 (Cronbach's alpha time two). In the present study, internal reliability was confirmed (Standardized alpha = .87) (See Chapter 6; Table 7).

"Independent Variable"

1. **Stress.** Since the experience of stress presumably initiates coping behaviours, a measure of stress appropriate for use with the dual-employed coping scale was included. In fact, a measure assessing the stress of the dual-employed lifestyle was essential since the coping scale required respondents to identify coping behaviours relevant to the dual-employed family arrangement. As Fleishman (1984) argues, coping behaviours are important aspects of the stress process, but as Lazarus and Folkman (1984)

add, coping behaviours must be relevant to the type of stress under study. For example, Mechanic (1962) focused on the stress of doctoral exams and the coping behaviours used to manage this. The coping behaviours used were found to be directly relevant to taking a doctoral exam and included allocating time, choosing test areas and developing test skills (Mechanic, 1962).

However, no suitable scale for focusing on the stress experienced by dual-employed families could be located. Therefore, a measure was developed for use in the present study. In explaining the nature of this measure, examples of sources of stress were taken from Skinner's (1982) delineation of stressors based on the work of Rapoport and Rapoport (e g., 1976; 1978), namely, internal and external stressors. More specifically, the question read: " Here you are asked to identify and describe the most stressful episode that you as a member of a dual-earner couple have experienced in the last month. This stressful episode may have occurred in either the work or family environment or in both, but must be something stressful that arose as a result of you being a dual-earner couple member". Respondents were, firstly, required to describe the incident and, secondly, to rate the degree to which the incident was perceived as stressful on a 5-point Likert scale ranging from "extremely stressful" (5) to "no impact" (1). Clearly, the stress scale included two measures: the <u>type</u> of stress experienced (i.e. category) and the <u>perceived stressfulness</u> of the event.

The open-ended method of assessing the stress of dual-employed family members was implemented for two reasons. Firstly, no known relevant measure of dual-employed family stress was known to the author at the time of questionnaire implementation. Given that the study of dual-employed

families is a relatively recent research area where studies on the topic have primarily been qualitative and exploratory in nature and have relied on case study methodology, research has had to rely on scales created inductively (Pendleton, Paloma & Garland, 1980). In addition, of those scales available, close inspection of the items revealed that they were inappropriate for the present study's purpose. For example, Pendelton et al. (1980) have developed six scales for investigation of the dual-career family. These scales cover the areas of (a) marriage type, (b) domestic responsibility, (c) satisfaction, (d) self-image, (e) career salience, and (f) career line, but do not assess the stress generated by the lifestyle. Additionally, the scales were designed specifically for facilitating future research on dual-career wives and husbands are excluded.

The Life Experiences Survey (Sarason, Johnson & Siegel, 1978) is a further example of an inappropriate stress measure. This scale contains 57 items where respondents are required to endorse the events that they have experienced during the past year. However, of the 57 items, 10 items are designed for students and a further 10 for single respondents. Of the 37 remaining items, reference is made to general stressful incidents (e.g., detention in jail and abortion) and do not focus on the stressors pertaining to the dual-employed lifestyle. As noted, a measure assessing the stress of the dual-employed lifestyle was essential as the coping scale required subjects to identify coping behaviours directly relevant to the dual-employed family arrangement.

Secondly, as previously observed, the study of dual-employed family stress is a relatively recent field of research. Identification of the sources and manifestations of stress is therefore a necessary first stage

in improving the quality and value of later research. However, this depends on qualitative research methods such as the use of open-ended questions (Turton, 1986). For example, in exploratory research on the relationship between coping and mental health, Aldwin and Revenson (1987) report the use of the open-ended question procedure. Specifically, they asked respondents to describe the most stressful episode they had experienced in the past month and to rate how stressful it was. Aldwin and Revenson (1987) say that one advantage of this approach lies in the wide range of stressful situations reported, but note that the main advantage of this approach is that coping behaviours could be assessed with the specific stressor in mind. Also, Wethington and Kessler (1986) used the open-ended technique in research on social support. Specifically, they assessed stressful life events by asking respondents "now think about the last time something really bad happened to you. What was it about?" (p. 80). Wethington and Kessler (1986) say that the open-ended technique focused on a specific stressor and in this way is consistent with the literature indicating a need for greater specificity in stress research.

Given the wide spread usage of an open-ended approach to assessing stress in situation-orientated research, as well as it being a worthy opportunity to gain qualitative information of the types of stressors experienced by dual-employed family members and their perception of the degree of stressfulness, this method was included as a suitable measure. However, this scale was only implemented once University staff with experience in stress research had scrutinised the measure and considered it to be appropriate. Due to the single item nature of the scale, no statistical internal reliability coefficient could be obtained.

"Moderator" Variable

1. **Coping.** The Dual-Employed Coping Scale (Skinner & McCubbin, 1981) is a coping measure designed to record what members of dual-employed families find helpful to them in managing work and family roles when both spouses are employed outside the home. For this scale, coping is defined as "personal or collective (with other individuals, programs) efforts to manage the demands associated with the dual-employed family lifestyle" (Skinner & McCubbin, 1981, p. 1). The Dual-Employed Coping Scale contains 49 items each reflecting a coping behaviour. Respondents are required to rate the extent to which they utilise each coping behaviour in response to the general remark "I cope with the demands of our dual-employed family by" on a five-point Likert format ranging from "strongly disagree" (1) to "strongly agree" (5). This format represents the extent to which each item reflects a method of coping that they typically use in managing the demands of their lifestyle. If the item is inappropriate in the sense that the dual-employed family member does not have children, respondents are then required to endorse the "no children" option (0).

The Dual-Employed Coping Scale provides a total coping score and four coping pattern scores. The total coping score is made up of the coping behaviours operationalised in all 49 items, while the four coping patterns are different combinations of the forty-nine coping behaviour items. Skinner and McCubbin (1981) report that the Dual-Employed Coping Scale may be used as a composite measure, or as a scale to assess only coping patterns. Additionally, the scale may be used to assess both simultaneously (e.g., Skinner, 1983).

The first pattern of the Dual-Employed Coping Scale focuses on behaviours that maintain, strengthen, and restructure the family system. Skinner (1982) says that there are two themes evident in this coping behaviour, namely, (a) the use of organisational skills to plan and restructure family life, and (b) the use of psychological resources. The second coping pattern is composed of those behaviours that attempt to modify conditions of the work/family interface. This pattern of coping represents behaviours that are aimed at reconciling work and family demands through behaviours of compromise and modification. Perceptually controlling the meaning of the lifestyle and managing strain is the third pattern of coping. This pattern includes behaviours that allow dual-employed family members to attend to personal needs and those that focus on reducing the demands of the present situation. The final coping pattern includes behaviours aimed at developing interpersonal relationships and procurement of support outside the family. The main theme of this coping pattern being the securing of outside support, goods and services.

Psychometric properties of the Dual-Employed Coping Scale have been indicated by Skinner (1983) who reports satisfactory internal reliability for the Dual-Employed Coping Scale as a composite measure (α = .86). Additionally, each of the four coping sub-scales were found to exhibit acceptable internal reliability. Specifically, alpha coefficients of .72, .76, .76, and .74 were found for maintaining, strengthening and restructuring the family system, modifying conditions of the work/family interface, perceptually controlling the meaning of the lifestyle and procurement of support, respectively. Within the present study, internal reliability coefficients for the total coping scale and sub-scales were satisfactory (see Table 2).

Table 2

Internal Reliability of the Dual-Employed Coping Scale

Total Scale and Abreviated Name of Coping Patterns	Standarised Alpha
Dual-Employed Coping Scale	.88
Maintaining Family System	.72
Modifying roles and standards	.70
Maintaining perspective, reducing strain	.75
Procurement of support	.75

Intercorrelations of the four coping sub-scales are presented by Skinner (1983) who reports moderate correlations. Skinner (1983) argues that moderate correlations of the four dual-employed coping patterns should be expected as the Dual-Employed Coping Scale is an instrument designed to measure dimensions of family life that are "in reality related" (p. 54). In the present study, correlation matrix of the coping patterns was examined and found to exhibit higher Pearson correlation coefficients than those reported by Skinner (1983) (see Chapter 6; Table 8). Therefore, following the example of Suchet and Barling (1986) who because of high intercorrelations on an interrole conflict scale (r = .38 - .75), used the scale as a unidimensional measure, the Dual-Employed Coping Scale was used as a composite indicator in the present study. As a result, coping pattern analyses were excluded from the analyses of the present research and the Dual-Employed Coping Scale was treated as a composite measure in all subsequent analyses.

Data Analysis

Two forms of data analysis were conducted in the present study. The first was content analysis which was applied to the open-ended scale on stress to determine the types of stressors facing dual-employed families. The second was the statistical procedure of moderated multiple regression which was used to assess the relationship between each dependent, independent and moderator variable. A separate discussion of each data analysis procedure follows below.

Content Analysis

In general, content analysis applies empirical and statistical methods to textual material (Holsti, 1969). In particular, content analysis consists of a division of the text into units of meaning and a quantification of these units according to certain rules (Lindkvist, 1981). Berelson (1952) defines content analysis as "a research technique for the objective, systematic and quantitative description of the manifest content of communication" (p. 18), while Paisley (1970) says, "content analysis is a phase of information-processing in which communication content is transformed, through objective and systematic application of categorisation rules, into data that can be summarised and compared" (p. 3). Together, Berelson (1952) and Paisley (1970) recognise content analysis as a basic research tool that is useful in a variety of disciplines and for many classes of research problems.

Like all methods of scientific enquiry, content analysis requires certain conditions to be fulfilled (Holsti, 1969). Firstly, in order to draw valid inferences from the text, classification procedures must be

reliable, in the sense of being consistent. In other words, the contents of the text must be coded in the same way at all times. Secondly, the classification procedure must generate variables that are valid (Holsti, 1969). A variable is said to be valid when it measures or represents what the investigator intends it to measure (Berelson, 1952). Below follows a discussion of reliability and validity as relevant to content analysis, as well as the content analysis procedure applied in this research.

1. Reliability

Weber (1983) says that there are three types of reliabilities pertinent to content analysis, namely, (a) stability, (b) reproducibility, and (c) accuracy. Firstly, stability refers to the extent to which the results of content classification are invariant over time. Secondly, reproducibility is defined as the extent to which content classification produces the same results when coded by more than one coder and refers to the same results being recorded despite different implementations (e.g., different locations and material forms). Thirdly, accuracy refers to the extent to which the classification of text corresponds to a standard norm. Although all three types of reliability may be applied to content analysed data, the form of reliability most often assessed is stability reliability (Weber, 1983).

2. Validity

The American Psychological Association Committee on Psychological Tests has distinguished between (a) content validity, (b) predictive validity, (c) construct validity, and (d) hypothesis validity (Anastasi, 1982). Firstly, content validity, also called face validity, is established

through the informed judgement of the investigator (Weber, 1983). Secondly, predictive validity is concerned with the ability of an instrument to predict events for which evidence is not at present available to the analyst (Weber, 1983). Thirdly, construct validity is the extent that a measure is correlated with some other measure of the same construct. Convergent validity, the correlation of measure with other measure of the same construct, and discriminant validity, no correlation with measures of dissimilar variables, are distinguished as forms of construct validity (Andren, 1981). Finally, hypothesis validity relies on the correspondence among variables and the correspondence between these relationships and theory (Anastasi, 1982). Of these types of validity, content validity is most frequently applied in content analysis (Weber, 1983).

3. Coding Procedure

The design and implementation of a coding scheme is essential in content analysis. This is essential for both human and computer coding and includes several basic steps (Andren, 1981). In the present study, human coding was the procedure used in content analysis and the eight steps outlined by Weber (1983) were followed. These steps were applied to a single measure incorporated in the questionnaire. This measure was an open-ended question relating to dual-employed family stress, where respondents were asked to describe a recent stressful incident related to their dual-employed family lifestyle and to rate the degree of perceived stressfulness. However, only the description of the stressful event was assessed during content analysis, and the rated stressfulness of the event was utilised later during moderated multiple regression. Before addressing the content analysis procedure, the questions to be

included were investigated. Also, relevant theory, previous research, and the text to be classified was investigated. Thereafter, the first step of content analysis as outlined by Weber (1983) was broached.

1. Step One - Define the Recording Units

   The basic units of text to be classified were sentence, theme and paragraph coding. These options were selected as respondents were required to describe a stressful incident in which the length of content varied.

2. Step Two - Define the Categories

   The categories chosen were mutually exclusive to avoid the potential problem of confounding (Weber, 1983). Also, categories were narrow and specific making reference to only a few words or entries. Initially, six categories were selected, namely (1) occupational problems, (2) domestic chore stress, (3) child-care problems, (4) role overload, (5) marital difficulties, and (6) "other". A seventh category representing financial problems was later added. These categories were considered to represent a true reflection of the relevant literature (e.g., Rapoport & Rapoport, 1976; 1978; Skinner, 1982; 1983).

3. Step Three - Test Coding on Sample of Text

   Test coding on a small sample of text was undertaken. Twenty randomly selected questionnaires were used. This step was undertaken to reveal ambiguities in the coding scheme and to provide insights and suggestions to revise the classification scheme. The classification scheme was revised as financial stress was reported and thus included to represent a further category.

4. Step Four - Assess Accuracy or Reliability

This refers to an assessment of the accuracy of coded text and not in the sense of a type of reliability (Weber, 1983). Errors were ascertained by checking that the correct category had been endorsed for the corresponding description of stress.

5. Step Five - Revise Coding Rules

Only a limited number of simple errors were detected. These were immediately corrected. It was therefore deemed unnecessary to alter rules of coding procedure as major errors were not present.

6. Step Six - Repeat Test Coding on Sample Text

If major errors are identified, coding rules must be redeveloped and retested on a sample of text (Weber, 1983). The cycle of steps (i.e. steps 4, 5 & 6) continues until all errors are rectified (Weber, 1983). As only administrative errors were detected and rectified, this step was omitted.

7. Step Seven - Code All the Text

Coding rules were then applied to all relevant textual material of the dual-employed family stress scale included in the questionnaire.

8. Step Eight - Assess Achieved Reliability and Validity

Once all the text was coded, reliability and validity was assessed. One form of reliability test was undertaken. This was the form of reliability known as stability which refers to the extent to which the results of content classification are invariant over time (Weber, 1983). Specifically, the textual material was coded on two occasions with a three week interval. During both coding times, the method for

analysing data as suggested by Weber (1983) was applied. The same results were obtained on both occasions.

Validity, like reliability, was assessed by one form. This type of validity is known as content validity and is established through the informed judgement of the investigator. On the basis of extensive literature reviews and in particular the work of Hall and Hall (1980), Rapoport and Rapoport (1978; 1982) and Skinner (1982; 1983), the content of the textual material was adjudged to be an accurate reflection of the stressors facing dual-employed family members.

From the content analysis procedure, the information provided by the dual-employed family subjects on the stress of their lifestyle was divided into texts of meaning, according to the application of consistent rules. This enabled the information to be included in statistical analyses. This information was subjected to two forms of statistical tests. Firstly, a binomial test was applied as there is indication in the literature that males and females could differ on specific types of stress within the dual-employed family arrangement and, therefore, it was necessary to assess whether difference applied in the present research (Epstein, 1971; Holmstrom, 1973; Skinner, 1982; 1983). This binomial test was a two-category or dichotomous population test which is a form of nominal scale containing only two classes or categories (male and female) (Runyon & Haber, 1980). From this, the probability of obtaining significant differences in male and female dual-employed family subjects on the various stress categories was calculated. The critical region was all values of male or female subjects within a certain category which were equal or less than the .05 level of significance. The critical region was one-tailed for categories for which relevant research had indicated

a direction of effect and two-tailed for categories for which no direction of effect had been demonstrated (Ferguson, 1976). Consequently, for the categories domestic chore stress, child-care problems and role overload a one-tailed critical region was set. A two-tailed critical region was set for occupational stress, marital difficulties, financial stress and the category termed "other" as no direction of the effect could be predicted from past research and theory. Secondly, moderated multiple regression was applied. This concerned multiple regression analyses for each dependent variable (i.e. job satisfaction, propensity to leave the organisation, marital communication, marital interaction, and psychological health), the independent variable (i.e. the perceived degree of stress for dual-employed stress as a composite variable and the perceived degree of stress for each stress category as identified through content analysis), and the moderator variable (dual-employed coping behaviours).

Moderated Multiple Regression

Moderated multiple regression was the statistical technique selected for the analysis of the data in the present study. This procedure was applied to assess the relationship between each dependent, independent and moderator variable and thus was implemented on some of the data obtained from content analysis. In particular, the information from content analysis that was used, was the identification of different types of stressors, as the perceived degree of stressfulness for each stress category was included separately as independent variables.

The moderated multiple regression statistical procedure, developed by Saunders (1956) from standard multiple regression, was chosen above other

techniques (e.g., Anova) because of its ability to include interaction terms (Zedeck, 1971). Indeed, not only does moderated multiple regression include interaction terms, but provides more information about main and interaction effects (Cohen, 1978). As the aim of the present study was to assess the moderating influence of coping in the relationship between perceptions of dual-employed family stress and five dimensions of adjustment, the moderated multiple regression technique was used. However, closer inspection of the technique follows to justify its suitability for the present study.

Standard multiple regression allows for the assessment of the relationship between a dependent variable (Y) and a set of independent variables (X_1, X_2, X_3 etc.). The dependent variable in standard multiple regression is regarded as a function of a set of independent variables. Moderated multiple regression differs from standard multiple regression in that it includes an interaction term in the equation. The interaction term is defined as the joint effect of two variables in accounting for the variance in the dependent variable, beyond the additive combination of their separate main effects (Cohen, 1978). The aim of moderated multiple regression is to test for significance the percentage of explained variance in each of the dependent variables due to: (a) the independent variable, (b) the purported moderator as an independent variable, and (c) the interaction term (Cohen, 1978). Therefore, moderated multiple regression is a form of standard multiple regression, but has increased predictive power due to the inclusion of the interaction term. This technique represents a more accurate account of relationships as it is far more common for variables to act in concert with one another than independently (Clearly & Kessler, 1982). However, as there is some confusion as to how interaction variables should be conceptualised,

analysed and interpreted (Aldwin & Revenson, 1987), it is important to explain the basic concepts underlying an interaction approach.

There are two basic concepts that underlie an interaction approach, namely, main effects and moderator effects. A main effect is the effect of an independent variable that is constant, regardless of the presence or absence of other variables or modifying influences. A moderator effect, on the other hand, is the effect of an independent variable that varies depending on the presence, absence or level of a third variable (Finney, Mitchell, Cronkite & Moos, 1984). Moderated multiple regression is able to assess both types of effects by a hierarchical analytical strategy that first assesses main effects, then partials them out to assess moderator effects (Pedhazur, 1982). Specifically, in assessing moderator effects, moderated multiple regression deals with them as conditional relationships between the dependent variable (Y) and two or more variables (A & B). A significant A * B interaction is explained as the regression of Y on A that is conditional or dependent on the value of B. In assessing main effects, moderated multiple regression assesses the relationship between the dependent variable (Y) and A (and B) irrespective of the value of B. This partialling out procedure is performed automatically by entering A, B and then A * B. Thus, as Suchet (1984) comments, "the moderated multiple regression technique is a multidimensional regression in which one equation is used to describe the relationship over all values of the independent (or predictor) variables" (p. 35-36).

Given the main property of moderated multiple regression, namely, that it allows for both main and moderator effect assessment, this statistical technique was seen as suitable for the purpose of the present study. In

addition, due to the extensive use of moderated multiple regression in the behavioural sciences, where models of behaviour are assumed to have both main and moderating effects, the use of this technique was an obvious choice (Finney et al., 1984). Consequently, the moderated multiple regression technique was the statistical method of choice in the present study.

When applying moderated multiple regression, separate regression equations were computed for each dependent variable (i.e. job satisfaction, propensity to leave the organisation, marital communication, marital interaction and psychological health). More specifically, for each dependent variable analysis, the first step was to enter the independent variable. The independent variable concerned the perceived degree of stressfulness of dual-employed family stress as a composite indicator or the perceived degree of stressfulness of one stress category. Therefore, the first step was to enter perceived impact of dual-employed family stress (composite indicator) or perceived stressfulness of one of the categories of dual-employed family stress (component indicators). This was followed by the moderator variable (i.e. dual-employed family coping), followed by the interaction term (i.e. dual-employed family stress impact (composite or one component indicator) x dual-employed family coping). For these forty separate analyses, the .05 level of significance was selected to determine the presence of significant effects. This cut-off point was deemed as acceptable as moderated multiple regression is recognised as a stringent procedure (e.g., LaRocco et al., 1980). For significant moderator effects, the direction of the significant effect was determined by plotting sub-group means. Sub-grouping analysis involves sub-dividing the significant independent variable and moderator at the median into high and low groups,

allowing for an analysis of the direction of the effect (Finney et al., 1984).

However, before computing moderated multiple regression analyses, the assumptions underlying this statistical technique were assessed, namely, (1) the relationship of biographical variables to the dependent variables, (2) linearity (3) measurement error, and (4) multicollinearity (Bluen, 1986).

1. **Relationship of biographical variables.** This assumption refers to the relationship of biographical variables to the dependent variables (Ballantine, 1989). A significant relationship indicated between a biographical and dependent variable means that the biographical variable must be included as a covariate in the moderated multiple regression equation of that dependent variable (Neale & Liebert, 1980). This is done in order to reduce the chance of obtaining spurious results (Bluen, 1986). The method for determining significant relationships is through three statistical procedures: (a) T-tests are conducted for categorical variables with two levels, (b) one-way analysis of variance are performed for multiple level, discrete biographical variables, and (c) Pearson correlation coefficients are calculated for continuous variables (Bluen, 1986).

2. **Linearity.** The linearity assumption underlying moderated multiple regression refers to the relationship between the independent and dependent variables which is assumed to be linear. Linearity tests are applied which assess whether a linear relationship between each independent and dependent variable exists. This is done by providing a breakdown of between-group sums of squares into that portion due

to linearity, and that portion attributable to deviation from linearity (Bluen, 1986). Using the F test of significance and the degrees of freedom, the significance of the linear and non-linear values is determined. If a significant F (deviation from linearity) is found, the linearity assumption is said to be violated. In addition, the linearity test provides information of the combined linear and non-linear variance explained, and the variance explained by the independent variable. In providing this, the non-linear contribution to the variance in the dependent variable can be calculated. The mathematical formula being:

$$F = \frac{(n^2 - r^2) / (G-2)}{(1 - n^2) / (N-G)}$$

where n = eta (correlation ratio)

r = correlation coefficient

G = number of grouping intervals

N = sample size, and

Degrees of freedom = (N-G) and (G-2) (McNemar, 1962).

3. **Measurement Error.** The third assumption of moderated multiple regression is that no measurement error exists. Although it is impossible to eradicate all possible measurement error, it is important to assess the extent of this as inaccurately measured data yields inaccurate estimates (Sall, 1985). One means of assessing measurement error is to calculate the reliability of all instruments (Bluen, 1986). One type of reliability was assessed in the present study, namely, the internal consistency of each scale.

4. **Multicollinearity.** The fourth assumption of moderated multiple regression is that there must be an absence of high multicollinearity.

This refers to the relationship between independent variables which should not be too highly correlated (i.e. r < .80; Pedhazur, 1982). Multicollinearity is assessed by calculating Pearson correlation coefficients of the relationship between independent variables. If no correlations greater than .80 are found, then it may be assumed that multicollinearity does not exist (Pedhazur, 1982).

Summary

This chapter outlined the method used in the present study. Specifically, it was noted that the present study was cross-sectional in design and that assessment was conducted by means of a questionnaire distributed to dual-employed family members employed in one of two organisations. The questionnaire comprised a number of scales designed to assess the "dependent", "independent" and "moderator" variables. Two forms of data analysis techniques were used, namely, content analysis and moderated multiple regression. The first technique was used to transform the open-ended question on dual-employed family stress into data that could be summarised, compared and included in statistical analysis. The second technique was used to detect the presence of significant main and moderator effects of the coping variable. A copy of the questionnaire is included in Appendix 1.

Chapter 6

RESULTS

Results of the present study are classified into two sections. Firstly, attention is directed at the results obtained from the content analysis procedure applied to the open-ended description of dual-employed family stress. Secondly, focus turns to the results obtained from the statistical procedure of moderated multiple regression. This section initially examines the results of the assumption tests and thereafter results of the moderated regression analyses are presented.

Results of Content Analysis Procedure

Content analysis by a human coder was applied to the open-ended descriptions of dual-employed family stress. The coding procedure outlined by Weber (1983) was adopted and the eight steps set out were followed which are described in detail in Chapter 5. The presence of the six categories selected in step two of the coding procedure was supported, namely, (1) occupational stress, (2) domestic chore stress, (3) child-care problems, (4) role overload, (5) marital problems, and (6) "other", representing an open category to include stressors such as pregnancy, ill-health and study commitments. A seventh category was identified in step three, namely, financial difficulties and thereafter was included. The categories were seen as a true reflection of the stressors of the dual-employed family especially as there is adequate empirical and theoretical evidence to support the stress categories. In particular, the work of Rapoport and Rapoport (1976; 1978) and Skinner (1982; 1983) is supported.

The number and percentage of subjects who mentioned events consistent with categories one to seven, differed. Table 3 indicates the number and percentage of respondents who endorsed a category, and shows how the numbers differed for male and female subjects. Also, Table 3 presents the results obtained for the binomial test which was applied to the content analysed data. Specifically, a two-category test was applied to detect significant differences between male and female subjects on the frequency of the seven types of dual-employed family stress. Results indicate that significant differences between male and female dual-employed family subjects occurred for the stress categories of "domestic chore" and "child-care" problems. No further significant differences between male and female subjects were found (see Table 3).

Table 3

Number and Percentage of Stress Categories and Binomial Test Results

Type of Stress	N (128)	%	Male N	Female N	Binomial Test
Occupational stress	33	26	21	12	NS
Domestic stress	29	23	8	21	*
Child-care problems	23	18	6	17	*
Other	15	12	4	11	NS
Role overload	12	9	3	9	NS
Marital problems	11	8	6	5	NS
Financial difficulties	5	4	1	4	NS

*p < .05

NS = Non-Significant

Results of Statistical Procedure

1. Results of Assumption Tests

Relationship of biographical variables. As biographical variables such as sex, length of marriage, number of children and position in organisation may be significantly related to the dependent variables, it was important to assess their relationship (Pedhazur, 1982). Specifically, T-tests were conducted for sex and organisation as each was a discrete variable with two categories (see Table 4), one-way analyses of variance were conducted for language and position in organisation as they were discrete variables with multiple levels (see Table 5), and Pearson correlations were computed between age, number of children, length of marriage, years of education and the dependent variables (see Table 6). Results indicated that no biographical variables were related to marital communication, marital interaction and general psychological health. However, organisation was significantly related to propensity to leave (see Table 4, $p < .05$) and language was significantly related to job satisfaction (see Table 5, $p < .05$). Therefore, organisation and language were entered as covariates in the relevant moderated multiple regression analyses and their effects thereby controlled statistically.

Tests for linearity. Tests for linearity were conducted for perceived dual-employed family stress (component and category analyses) and coping with every dependent variable. Results revealed that the relationship was linear as examination of the relevant F-value suggested that all relationships between the dependent variables and independent variables did not significantly deviate from linearity. Therefore, the assumption of linearity was seen as satisfied (see Appendix 2).

Table 4

T-tests for the Dichotomous Demographic Variables for the Dependent Variables

Dependent variables		Sex		Organisation	
		Male	Female	One	Two
Job satisfaction	n	49	79	59	69
	M	41.96	40.81	41.52	41.01
	t	1.07		-0.32	
Propensity to leave	n	48	79	59	68
	M	10.17	10.14	10.63	9.74
	t	0.06		1.76*	
Marital communication	n	49	79	59	69
	M	93.39	95.08	94.08	94.72
	t	-0.77		-1.02	
Marital interaction	n	48	79	58	69
	M	76.35	77.08	77.62	76.12
	t	-0.34		-1.64	
Psychological health	n	48	49	58	69
	M	32.15	31.42	31.72	31.67
	t	0.65		-0.26	

*p < .05

Measurement error. The presence of measurement error was assessed by conducting internal consistency reliability tests. Standardised alpha's are reported for all scales (exception stress scale) in Table 7. This shows that internal reliability coefficients were most satisfactory (M α = .85; range = .71 - .89). Therefore, taking into account the calculated internal reliability coefficient scores obtained, and the reported reliability and validity of the instruments (see measuring instruments), the assumption of no measurement error was seen as fulfilled.

Table 5

One-way analyses of variance of demographic variables for the dependent variables

Dependent variable		Language	Position in organisation
Job satisfaction	F df	3.52* 2/125	0.30 3/124
Propensity to leave	F df	0.38 2/124	0,22 3/123
Marital communication	F df	0.85 2/125	1.61 3/124
Marital interaction	F df	0.19 2/124	1.56 3/124
Psychological health	F df	0.12 2/124	1.44 3/123

*p < .05

Table 6

Pearson Correlations of Dependent Variables, Independent Variables and Continuous Demographic Variables

		1	2	3	4	5	6	7	8	9	10	11
Independent variables:												
1	"Perceived Stress"	-										
2	Coping	0.12	-									
Dependent Variables												
3	Job satisfactior	-0.19*	0.07	-								
4	Propensity to leave	-0.11	0.20*	0.32***	-							
5	Marital communication	-0.04	-0.06	0.24**	0.04	-						
6	Marital interaction	-0.07	-0.07	0.31***	-0.01	0.66***	-					
7	Psychological health	-0.20*	0.06	0.33***	0.08	0.31***	0.39***	-				
Demographic variables												
8	Age	-0.09	0.09	0.01	0.11	-0.15	-0.10	-0.16	-			
9	Number of children	-0.04	0.45***	0.07	0.23*	-0.22*	-0.21*	-0.10	0.44***	-		
10	Length of marriage	-0.28	0.08	-0.00	0.09	-0.13	-0.16	-0.19	0.85	0.57	-	
11	Years of education	0.04	-0.08	-0.05	-0.10	0.09	0.07	-0.08	-0.13	-0.04	0.04	-

*p < .05

**p < .01

***p < .001

Table 7

Internal Consistency of Measuring Instruments

Measuring instruments	N of items	Item Min.	Range Max.	M	SD	Alpha
"Perceived Stress"	1	1	5	3.60	1.10	-
Coping*	49	0/1	5	163.13	29.84	.88
Job satisfaction	16	1	3	41.25	5.89	.84
Propensity to leave**	3	1	3/6	10.15	2.38	.70
Marital communication	25	1	5	94.43	11.99	.87
Marital interaction	20	1	5	76.80	11.55	.89
Psychological health	12	1	4	31.69	6.07	.87

* For the coping scale, items marked as "not applicable" (i.e. no children) are scored 0,

** For the propensity to leave scale, items 1 and 2 are scored on a 3-point scale, item 3 on a 6-point scale.
A high score on this scale indicates the potential of a subject to stay employed.

Multicollinearity. In view of Skinner's (1983) finding that intercorrelations of the Dual-Employed Coping Scale (Skinner & McCubbin, 1981) were moderately correlated (r = .47 or less), and the observation that such correlations should be expected since the scale is designed to assess dimensions of family life that are in "reality related" (Skinner, 1983, p. 54), correlations between the Dual-Employed Coping Scale were conducted. Pearson correlations coefficients confirmed the existence of high correlations (See Table 8).

Table 8

Pearson Correlation Coefficients of Dual-Employed Family Coping Scale

Abbreviated Dual-Employed Coping Scale Pattern	1	2	3	4
1. Maintaining family systems	-			
2. Modifying roles and standards	.51***	-		
3. Maintaining perspectives reducing strain	.74***	.39***	-	
4. Procurement of support	.59***	.41***	.69***	-

*p < .05
**p < .01
***p < .001

The implication of the high intercorrelations between the dual-employed family coping sub-scales is that it is implausible to treat the four sub-scales as separate aspects of coping. Rather, the coping sub-scales were combined into one predictor variable as the sub-scales shared so much common variance. Skinner and McCubbin (1981) say that the Dual-Employed Coping Scale may be used as an unidimensional measure and, therefore, subsequent analyses of the coping scale were limited to composite analyses. This is consistent with Suchet and Barling (1986) who report the use of an interrole conflict scale as a composite measure because of similar high intercorrelations. Further intercorrelation analysis of the remaining variables revealed satisfactory Pearson correlation

coefficients (r = .66 or less). The assumption of multicollinearity for the remaining variables was, therefore, not challenged (see Table 6).

As all the assumptions underlying moderated multiple regression were satisfied, moderated multiple regression statistical analyses were conducted. The results of these analyses conducted for each dependent variable are presented separately in the following section.

2. Results of Moderated Multiple Regression Analyses

Job satisfaction. Job satisfaction was regressed onto the covariate language, followed by perceived dual-employed family stress as a composite measure and dual-employed family coping. An interaction term (perceived dual-employed family stress x dual-employed family coping) then followed. Only one significant finding emerged, that is, perceived dual-employed family stress had a significant main effect on job satisfaction ($F(3;18) = 4.78$, $p < .05$) explaining 4% of the variance. Results of the moderated multiple regression for job satisfaction are presented in Table 9.

Table 9

Moderated Multiple Regression for Job Satisfaction on Perceived Dual-Employed Family Stress and Dual-Employed Family Coping

Variable entering equation	R^2	R^2 change	Beta	F
Covariate				
Language	0.01	0.01	-1.21	1.60
Stress	0.05	0.04	-0.10	4.78*
Coping	0.05	0.00	0.03	0.21
Stress x Coping	0.05	0.05	-0.01	0.13

*p < .05

Further statistical analyses for the dependent variable job satisfaction were undertaken. This concerned separate regression equations for the perceived degree of stressfulness for each of the categories of dual-employed family stress, as identified through the content analysis procedure. Analyses were conducted in a similar manner, except perceived dual-employed family stress was replaced by a rating of the stressfulness of a particular category of dual-employed family stress in turn, followed by dual-employed family coping, followed by the interaction term (i.e. perceived stressfulness of a particular category x dual-employed family coping). Results of these separate analyses revealed significant results for perceived stressfulness of only one stress category, namely, "overload". That is, overload had a significant main effect on job satisfaction ($F(3;2) = 14.06$, $p < .05$), explaining 36% of the variance in job satisfaction. A significant interaction result between dual-employed overload and dual-employed coping ($F(1;4) = 16.60$, $p < .05$) was also indicated, accounting for 41% of the variance. Table 10 presents these findings, and directionality of the significant interaction effect is presented diagrammatically in Figure 1.

Table 10

Moderated Multiple Regression for Job Satisfaction on Perceived Dual-Employed Family Stress "Overload" and Dual-Employed family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Language	0.08	0.08	3.41	5.09
Stress	0.44	0.36	-52.73	14.06*
Coping	0.47	0.03	1.08	0.00
Stress x Coping	0.88	0.41	0.03	16.60*

* $p < .05$

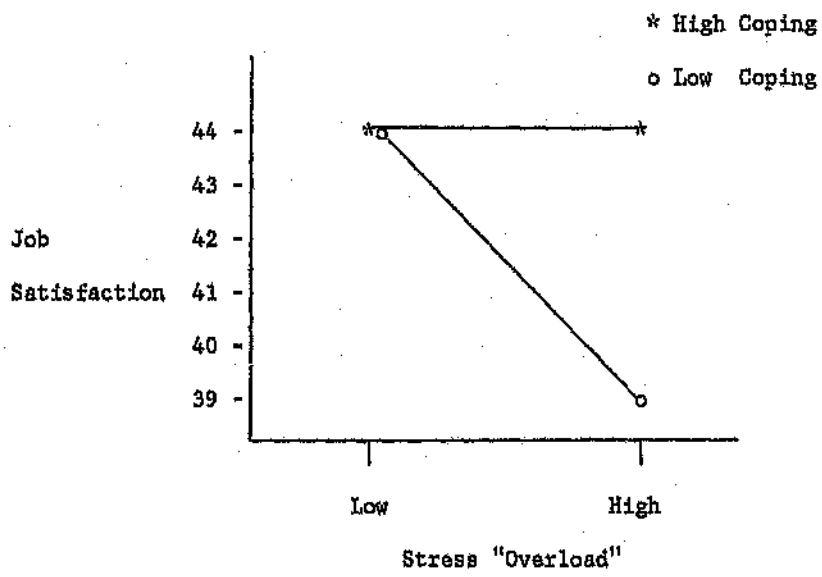

Figure 1. Direction of Perceived Dual-Employed Family Stress "Overload" and Dual-Employed Family Coping on Job Satisfaction.

From Figure 1, it can be seen that dual-employed family members with high levels of coping skills record greater job satisfaction scores when a high amount of "overload" is experienced, than those with low coping skills. No or little differences in levels of job satisfaction are recorded at low levels of stress "overload".

Statistically non-significant moderated multiple regression results for job satisfaction and the remaining categories of stress may be found in Tables 1 - 6 in Appendix 3.

Propensity to leave. Propensity to leave was regressed onto the covariate organisation followed by similar independent, moderator and interaction terms entered in the previous analyses. Also, the same stress category analyses were conducted. When perceived dual-employed family stress was treated as a composite measure, one significant finding emerged. That is, dual-employed coping had a significant main effect on propensity to leave ($F\ (2;118) = 4.39$, $p < .05$), accounting for 2% of the variance in propensity to leave. Table 11 presents this finding.

Table 11

Moderated Multiple Regression for Propensity to Leave on Perceived Dual-Employed Family Stress and Dual-Employed Family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Organisation	0.04	0.04	-0.85	4.23
Stress	0.05	0.01	-0.30	1.33
Coping	0.07	0.02	0.02	4.39*
Stress x Coping	0.08	0.01	-0.00	0.21

*$p < .05$

Moderated multiple regression analyses of the stressfulness ratings of the dual-employed family stress categories revealed two significant findings for the stress category of "overload". Specifically, overload had a significant main effect on propensity to leave ($F\ (3;2) = 17.78$, $p < .05$) explaining 53% of the variance. Also, dual-employed family coping had a significant main effect on propensity to leave ($F\ (2;3) = 7.88$, $p < .05$) accounting for 24% of the variance (see Table 12).

Table 12

Moderated Multiple Regression for Propensity to Leave on Perceived Dual-Employed Family Stress "Overload" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Organisation	0.01	0.01	1.32	0.77
Stress	0.54	0.53	-9.68	17.78*
Coping	0.78	0.24	0.13	7.88*
Stress x Coping	0.85	0.07	0.06	2.46

*p < .05

Statistically non-significant results for propensity to leave may be found in Tables 7 - 12 in Appendix 3.

Marital Communication. Marital communication was regressed onto similar independent, moderator and interaction terms as in the previous two analyses. Likewise, similar stress category analyses were undertaken. No significant findings emerged for the first analysis (i.e. perceived dual-employed family stress as a composite measure), but a significant finding was revealed for the stressfulness rating of the dual-employed family stress category of "overload". Here moderated multiple regression analyses revealed that perceived stressfulness of overload had a significant main effect on marital communication ($F (3;4) = 16.36$, $p < .05$) explaining 41% of the variance. Table 13 displays this result.

Table 13

Moderated Multiple Regression for Marital Communication on Perceived Dual-Employed Family Stress "Overload" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.41	0.41	-36.30	16.36*
Coping	0.68	0.27	-0.59	0.67
Stress x Coping	0.76	0.08	0.18	2.08

*p < .05

Non-significant results for marital communication may be found in Tables 13 - 19 in Appendix 3.

Marital Interaction. Marital interaction was regressed onto the same independent, moderator and interaction terms that were included in all previous analyses. When perceived dual-employed family stress was treated as a composite measure, no significant findings emerged. However, when the stressfulness ratings of the categories were undertaken, significant findings emerged for the category "child-care" stress and the category labelled as "other". Firstly, child-care stress was found to have a significant main effect on marital interaction (F (3;16) = 5.02, p < .05) explaining 19% of the variance (see Table 14). Secondly, for stress "other" the interaction term yielded a significant interaction effect (F (1;10)= 5.21, p < .05), explaining 31% of the variance in marital interaction (see Table 15).

Table 14

Moderated Multiple Regression for Marital Interaction on Perceived Dual-Employed Family Stress "Child-Care" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.19	0.19	-16.94	5.02*
Coping	0.24	0.05	-0.17	1.41
Stress x Coping	0.29	0.05	0.08	1.38

*p < .05

Table 15

Moderated Multiple Regression for Marital Interaction on Perceived Dual-Employed Family Stress "Other" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.01	0.01	-18.79	0.25
Coping	0.03	0.02	0.34	0.30
Stress x Coping	0.34	0.31	-0.12	5.21*

*p < .05

Directionality of the significant interaction effect is presented in Figure 2.

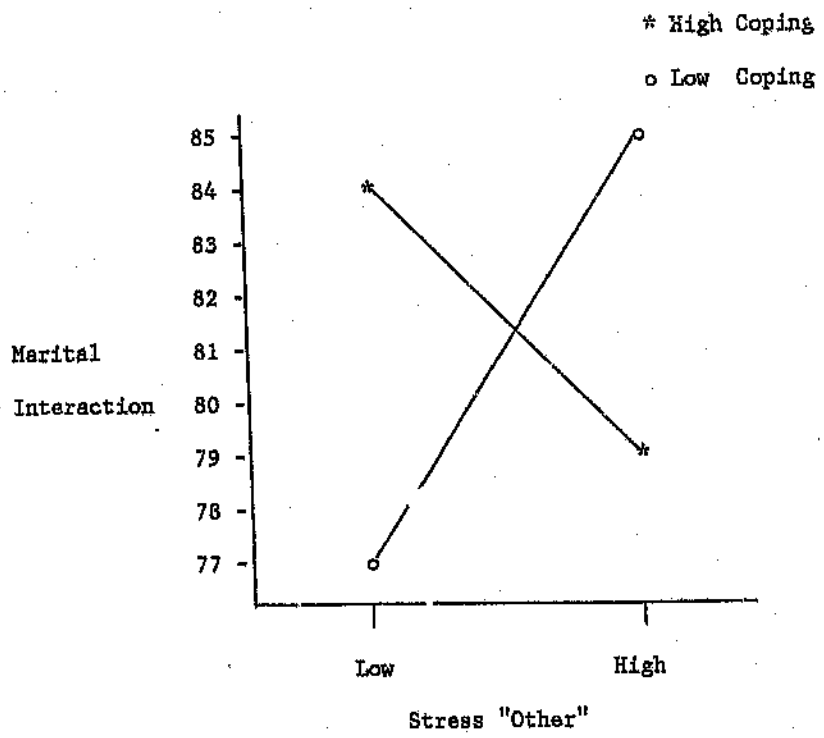

Figure 2. Direction of Perceived Dual-Employed Family Stress "Other" and Dual-Employed Family Coping on Marital Interaction.

From Figure 2, it is apparent that, contrary to expectation, dual-employed family members with low levels of coping skills record higher levels of marital interaction in times of high stress "other". At low levels of stress "other", dual earner subjects with high levels of coping record higher levels of marital interaction than those with low levels of coping.

Statistically non-significant results for marital interaction are presented in Tables 20 - 25 in Appendix 3.

Psychological health. Moder multiple regression analyses for psychological health followe same procedure as previous analyses. Firstly, when perceived dual-employed family stress was entered into the equation as a composite measure, a significant main effect on psychological health emerged (F (3;116) = 4.76, $p < .05$) explaining 4% of the variance (see Table 16). Secondly, when stress category analyses were conducted, a main effect for the stressfulness rating of the category "overload" and psychological health emerged (F (3;3) = 12.99, $p < .05$), accounting for 60% of the variance in psychological health (See Table 17).

Table 16

Moderated Multiple Regression for Psychological Health on Perceived Dual-Employed Family Stress and Dual-Employed Family Coping

	R^2	R^2 change	Beta	F
Stress	0.04	0.04	-0.99	4.76*
Coping	0.04	0.00	0.01	0.17
Stress x Coping	0.04	0.00	-0.00	0.00

*p < .05

Table 17

Moderated Multiple Regression for Psychological Health on Perceived Dual-Employed Family Stress "Overload" and Dual-Employed Family Coping

	R^2	R^2 change	Beta	F
Stress	0.60	0.60	-5.39	12.99*
Coping	0.68	0.08	-0.03	0.01
Stress x Coping	0.68	0.00	0.01	0.05

*p < .05

Non-significant findings for psychological health may be found in Tables 26 - 31 in Appendix 3.

Summary

This chapter presented the results of the present study. This included the results obtained from the content analysis procedure and results from moderated multiple regression. Firstly, content analysis results established the existence of seven forms of stress relevant to the dual-employed family lifestyle, namely, (1) occupational stress, (2) domestic chore stress, (3) child-care problems, (4) role overload, (5) marital problems, (6) financial difficulties, and (7) "other". These categories were seen as a true reflection of the stressors facing dual-employed families and were consistent with the relevant literature (e.g., Rapoport & Rapoport, 1976; 1978; Skinner, 1982). A binomial test indicated significant differences in the frequency of responses by male and female subjects in two stress categories, namely, "domestic chore" and "child-care". Secondly, statistical analyses were conducted once the assumptions underlying the statistical technique of moderated multiple regression were fulfilled. These analyses revealed support for a main effect between perceived dual-employed family stress and various dependent variables and the stressfulness rating of the different categories of stress and various dependent variables, as well as a main effect between dual-employed family coping and one dependent variable. Evidence of two moderator effects for dual-employed family coping was indicated. All non-significant findings are included in Appendix 3.

Chapter 7

DISCUSSION

The present study collected descriptive information on the stressors of the dual-employed family. This information was content analysed which confirmed the existence of seven types of stress. A binomial test indicated that significant differences occurred between male and female subjects for the stress categories of "domestic chore" and "child-care" problems. The present study also collected information on the perceived impact of each type of stress as well as information on job satisfaction, propensity to leave the organisation, marital communication and interaction and coping behaviours. This latter information was analysed using the statistical technique of moderated multiple regression. The statistical analyses were conducted to assess the relationship between each dependent variable, independent variable and moderator variable within a main effect and moderator model. This occurred for perceptions of dual-employed family stress as a composite scale as well as a component indicator which was the stressfulness rating of a particular type of stress as identified through the content analysis procedure. Below follows a discussion of the findings of the content analysis procedure, followed by a discussion of the moderated multiple regression results.

Discussion of Content Analysis Results

In conducting the content analysis, detailed attention was directed to the stressful experiences described by dual-employed family subjects. The description of stressful experiences was provided in answer to an open-ended question that required subjects to outline the most stressful

incident that had occurred in the preceding month and was related to their dual-employed family lifestyle. Answers were coded in relation to seven categories of stress relevant to the dual-employed lifestyle based on a theoretical rationale (e.g., Rapoport & Rapoport, 1976; 1978; Skinner, 1982). Content analysis confirmed the presence of seven categories: (a) occupational stress, (b) domestic chore stress, (c) child-care problems, (d) role overload, (e) marital problems, (f) financial stress, and (g) a category labelled as "other". This latter category included stressors such as ill health, pregnancy and study commitments and represented those events that were not necessarily a direct result of the lifestyle, but were events that affected the family. Discussion now turns to a general analysis of each category, which is discussed in order of the frequency for which the category was recorded. Discussion also focuses on the result of a binomial test which indicated that there was a significant difference between male and female dual-employed family subjects on the frequency of "domestic chore" and "child-care" stress.

1. **Occupational Stress.** Careers are undoubtedly a major source of life satisfaction for most individuals, but this may occur for <u>both</u> husband and wife in dual-employed marriages (Hall & Hall, 1980). Careers, however, may also be a major source of stress for individuals, particularly in highly pressurised occupations (Lewis & Cooper, 1989). In general, occupational stress refers to occupational demands such as heavy workload and time pressure, role ambiguity, and high supervisor control in conjunction with the lack of opportunity to participate in decision-making (Billings & Moos, 1982). However, work demands alone may not be the sole determinant of stress. Indeed, as the present study confirms, the demands of the home environment and in particular the attempt to balance work and family demands, is also a cause of

occupational stress. In fact, the present study found that 26% of subjects indicated "occupational" stress, making it the most frequently mentioned category.

"Occupational stress" for dual-employed families refers to work-related areas that negatively affect attempts to balance work and family demands (Lewis & Cooper, 1989). For example, work overload and working long hours at work are work-related areas that may cause stress for dual-employed families. Hall and Hall (1980) say that for all family types the implication of long working hours is that less time is available for family activities, child-care and domestic arrangements. For dual-employed families, however, the implication of long working hours is that the delicate balance of work and family demands that the family has established, is threaten d. Also, if only one partner in the dual-employed family arrangement works long hours, there may be a need for the other partner to perform additional duties. This may lead to feelings of resentment (e.g., Lewis and Cooper, 1989).

A second example is schedule incompatibility and inflexibility (Lewis & Cooper, 1989). This source of stress is more pronounced in dual-employed families with young children as hours of work rarely fit in with the hours of schools and infant and child-care facilities (Pleck & Staines, 1985). Also, the assumption of "the male model of work" prevails in many organisations which assumes that men and women will be able to work long hours and subordinate the demands of all other aspects of their lives to their work. The effect of this assumption is that feelings of tension and guilt are experienced by the dual-employed family member when family demands spill-over into the work-place (e.g., Beutell & Greenhaus, 1983; Greenhaus, Parasuramen, Granrose, Rabinowitz & Beutell, 1989).

A third example is work mobility and relocation (Lewis & Cooper, 1989). In many instances, career promotions are accompanied by a need for the worker to be more mobile or to relocate to a new work site (Gilmore & Fannin, 1982). This presents a major upheaval for most families as there is a need to consider social networks and children's education. For dual-employed families, however, an additional factor must be considered, namely, the career needs of the spouse. Although most decisions regarding mobility and relocation are presently taken following the traditional line of thought, that is, to favour the husband's career, this does not necessarily mitigate the stress of these decisions, nor the constraints on those who opt not to relocate (Gilbert, 1985).

A final example is prejudice and discrimination within the workplace directed at dual-employed families (Lewis & Cooper, 1989). Given that many organisations adhere to a "male model of work", it is not surprising that stereotyped assumptions are made (Puckrin, 1990). These stereotyped assumptions are prejudicial against employed women and to, a lesser extent, employed men wishing to increase their family involvement (Lewis & Cooper, 1989). Such prejudice is inherent in discriminatory practices in the workplace (e.g., Rosen & Jerdee, 1974; Rosen et al., 1975). For example, in South Africa, Puckrin (1990) says that dual-career female subjects reported that they had to contend with discriminatory practices in the workplace, specifically in recruitment, promotion and fringe benefits. They noted that if they were involved in child-rearing they were victims of the belief that they were not committed to their careers.

2. **Domestic Chore Stress.** Although more recent research on dual-employed families has moved away from documenting the special problems and conflicts of dual-employed families such as the division of

home tasks (Hall & Hall, 1980), there is recent evidence that shows that the maintenance of the home is still a considerable stressor for dual-employed families (e.g., Gunter & Gunter, 1990). Indeed, the findings of the present study confirm the existence of domestic chore stress and report it as the second most frequently indicated stressful event (23%).

Accepted wisdom holds the view that home, as opposed to work, represents the leisure sphere of life. The home is thought of as the place of peace and relaxation, a haven to return to after the rigours of work (Lewis & Cooper, 1989). However, for dual-employed family members nothing can be further from the truth as maintaining a home is demanding work. In fact, for dual-employed families, maintaining a home represents a third job that must be performed after employment commitments, and handled as overtime (Skinner, 1982). Alternatively, domestic chores must be delegated to other persons (e.g., domestic helpers).

In view of this, the present study's confirmation of domestic chore stress is not surprising, considering that, unlike the traditional family pattern, the female family member is no longer at home to manage and perform household tasks. Hall and Hall (1980) say that by adding a second employment role to the traditional family structure, the other roles of family life are not eliminated but instead are placed in a different perspective. Specifically, for the female member the traditional role of homemaker no longer overlaps with the parent and spouse role, but these roles may still remain. For the male member, he can no longer meet parent and spouse obligations merely through his income and must perform additional duties other than those traditionally delegated. Clearly, when both spouses are employed, the roles of parent, partner and homemaker

have to be reduced, redefined or redistributed. This may involve a balanced and equitable allocation of tasks at home. However, a balanced and equitable allocation of tasks may not necessarily occur between male and female members as was indicated in the present study.

The binomial test indicated a significant difference between male and female subjects on domestic chore stress as significantly more female than male subjects mentioned this type of stress. This difference is explained as consistent with the relevant literature which indicates that although many proponents of the dual-employed lifestyle assume that it automatically brings with it a more equitable division of household duties, this rarely occurs in reality (e.g., Henwood, Rimmer & Wicks 1987; Gunter & Gunter, 1990). Specifically, it appears that female members of dual-employed families do most of the housework and, therefore, frequently work a double day: at work and at home. The reason for this may lie in Western cultural definition of whose duty it is to perform and manage home-tasks. Many dual-employed families accept the cultural definition of housework as being a commitment of women, irrespective of employment status (Measures, 1982). Consequently, it appears that although males and females accept the right of the wife to have a career, women feel, and are made to feel, responsible for home-tasks. Sund and Ostwald (1985) say that the belief that domestic work is a woman's responsibility stems from people's experiences of their own parents' behaviour, which is reinforced by the media who display the idea that the kitchen is still the woman's domain while male contribution to household chores merely constitutes "help".

In South Africa, domestic chore stress is alleviated to some extent by domestic labour which is relatively cheap and accessible. This was

confirmed by Puckrin (1990) who found that 75% of the dual-career women, and in particular the White dual-career respondents, mentioned that their "maid" or "servant" was indispensable to them in managing their work and family lives. However, even though the burden of physical responsibility was removed from these women, the task of managing the household remained their responsibility. Black career women indicated that they experienced many problems with domestic labour, for example, irresponsibility and disloyalty, while both White and Black career women noted that their husbands provided little physical assistance. Indeed, in no more than 15% of cases did the dual-career women report that their husbands occasionally shared in the household chores.

3. **Child-care Problems.** Given that neither parent in dual-employed families is at home during the day to provide exclusive parenting, and that alternate child-care arrangements must be sought, child-care problems may arise as a form of stress for dual-employed families. Indeed, the present study confirmed the existence of child-care problems as a stressor of the dual-employed family lifestyle (18%).

The presence of children appears to affect the complexity of the dual-employed lifestyle (Skinner, 1982). For example, St. John-Parsons (1978) found that none of the dual-career families maintained extensive social relationships due to a strong sense of responsibility for, and devotion to, their children. Also, the demands of young children and in particular finding suitable child-care facilities, appears to be a major problem for dual-employed families. Holmstrom (1973) says that a major reason for child-care problems is the isolation of the modern nuclear family. In fact, Holmstrom (1973) says that rearing children apart from

relatives or other such extended support systems, operates as a barrier to having two work roles in one family.

The binomial test indicated a significant difference between male and female subjects for child-care problems (i.e. significantly more females than males reported this type of stress). This is interpreted as consistent with the relevant literature which shows that females are more likely to experience child-care problems (Skinner, 1982; Sund & Ostwald, 1985). Reasons for this may lie in cultural expectations of the exclusive role of the mother (Zambrana et al., 1979). Specifically, Western cultures have promoted the idea that mothers of young children should be mothers first and foremost, and not paid workers. The result of this is that many mothers internalise this value and may consequently experience confusion, ambivalence, guilt and anxiety when employed (Stanfield, 1985). Measures (1982) observes that the expectation of Western cultures that a mother should remain at home to care for her children is directly contradictory to the realities of female participation in the workforce.

A second reason may be due to the lack of structural support (e.g., child-care centres). Zambrana et al. (1979) say that the effect of a lack of structural support is that the responsibility for child-care remains with traditionally defined roles and, therefore, the mother assumes primary responsibility for child-care. Furthermore, the impact of maternity leave may play an important role in shaping patterns of parenting as during the early weeks of a baby's life, the mother is at home to care for the baby in most cases, which provides an opportunity to form a close mother-child bond. Also, as the mother usually performs most of the child-care tasks this establishes a division of labour from the start which usually continues after the mother returns to work (Lewis

& Cooper, 1989). Finally, organisational constraints such as prejudicial and discriminatory policies against fathers wishing to increase their family commitments may ensure that the mother continues to be the main child-care provider (Hall, 1990).

Previous South African research on child-care arrangements shows that child-care is a major source of strass for dual-employed families, especially for those with small children (e.g., Bryant, 1990). For Black career women, the lack of adequate child-care facilities has been indicated as a constant worry, and the unsettled situation in the Black townships is a concern for working mothers as they worry abou their children's physical and psychological well-being (Puckrin, 1990).

4. Other. An open-ended category referred to as "other" was included in the present research to allow for additional stressful events not represented by the other stress categories. Within this category, events represented were those that were not a direct consequence of the dual-employed lifestyle, but instead were unique or specific events that impinged on the dual-employed family arrangement, upsetting the balance that they had been able to secure. For example, some of the events indicated were the birth of a baby, visiting elderly relatives, and ill-health. The percentage of subjects who reported this category was 12%, representing the fourth most frequently mentioned category.

The events included in the "other" category may be described in terms of three concepts. Firstly, many of these "other" events were unpredictable. Unpredictability has the effect of finding the dual-employed family unprepared to deal with the source of stress as steps to manage the event must be reactive. Hall and Hall (1980) say that

although predictable events may also be stressful, they enable individuals to minimise the amount of stress by preparing physically and psychologically for the event. Unpredictable events are more likely to arise from uncertainty within the home environment. For example, Hall and Hall (1980) say that uncertainty was more likely to be associated with the unreliability of a baby-sitter, health of a child, and transport problems. Secondly, many of the "other" events may be described as uncontrollable. Hall and Hall (1980) say that part of the stress of unpredictable events is that there is no control. However, there are events that may be predictable, but an individual may not have control. In such instances, the stress of the event for dual-employed families can only be absorbed and not managed (Lazarus & Folkman, 1984). Thirdly, "other" events may be defined as events that precipitate change. Lin et al. (1979) say that change is accompanied by a certain degree of stress due to the unknown quotient that change produces and to the adjustment that the change requires. For dual-employed families, change in their lifestyle (e.g., the birth of a baby) means that a new set of duties must be negotiated. Research by Lewis and Cooper (1989) found that dual-employed subjects adapted to change by re-delegating tasks and by one spouse supplementing the other.

There are two implications of the "other" category. Firstly, although many sources of stress arise directly from the dual-employed lifestyle, there are additional sources of stress from external structures that affect the lifestyle, as it does to all forms of family life. However, external sources of stress for dual-employed families have a different significance as the balance of work and family commitments that has been secured, is threatened. Secondly, although most stressors may be delineated to specified categories of stress such as those identified in

the literature (e.g., Rapoport & Rapoport, 1978; Skinner, 1982), there are additional sources of stress that pertain to specific families. The implications of the "other" category thus supports the notion that research on stress and dual-employed families must operate within an open-systems model (e.g., Barling, 1990), however, emphasis must also be made of the importance of individual differences, and the idea that each family faces a particular set of circumstances within the context of a unique personal family history (Lazarus & Folkman, 1984).

5. Role Overload. Role overload is defined as having too many role-related demands that satisfactory performance in each is improbable (Barnett & Baruch, 1985). The present study found that 9% of subjects described this type of stress.

Role overload is identified as a common source of stress for dual-employed families which arises because each individual is engaged in active work and family roles (Hall & Hall, 1980). Skinner (1982) says that the total volume of activities in dual-employed families is considerably increased over that experienced by traditional families. Past research indicates that female members appear to experience greater role overload than male members (e.g., Gunter & Gunter, 1990; Henwood et al., 1987). Reasons for this may be that traditionally the home-tasks have been the responsibility of the female and by adding an employment role to her traditional roles of wife and mother, greater demands are placed on her in terms of time and energy (St. John-Parsons, 1978). However, no significant differences between male and female subjects in the frequency of "role overload" were found in the present study. Past research also indicates that dual-employed parents of pre-school children experience greater levels of role overload in comparison to childless couples (Hall & Hall, 1980).

Lewis and Cooper (1987) say this arises due to the maximum child-care demands placed on dual-employed couples. However, they add that the demands of child-care do not always decrease as children grow older, but demands change and to some extent are more accommodating.

6. Marital Problems. Research (e.g., Davidson & Cooper, 1985; Hiller & Philliber, 1982; Houseknecht & Macke, 1981) undoubtedly shows that the growth of the dual-employed family has had an impact on the institution of marriage. In particular, spouses must adapt to the new patterns of relationships that are not yet mirrored by equivalent changes in the work environment (Lewis & Cooper, 1989). This was confirmed in the present study as 8% of subjects mentioned marital difficulties as the major stressor of their lifestyle.

Three reasons are offered as to why marital problems may arise. Firstly, a dual-employed lifestyle necessitates a review of traditional marital roles since this lifestyle in itself does not result from, or lead to, egalitarian attitudes (Puckrin, 1990). Rather, for an employed woman to realise satisfaction from her working role, a support structure must be established. This includes the support of her husband, who must be willing and able to, share in the maintenance of the home and the care of the children, as well as cope with a wife's success without resentment and feeling threatened (Hiller & Philliber, 1982). Gilbert (1985) says that many men do adapt successfully to the "new man ethic" and derive great pleasure from their wives' achievement. However, others are more ambivalent and this may develop into a conflict area. In explaining this, Gilbert (1985) says that these men overtly subscribe to the ideal of an egalitarian marriage, but covertly yearn for the traditional marriage that they were possibly exposed to in their early years. Still other men

may establish "quasi traditional" marriages in spite of the fact that both spouses have employment roles. This involves the marital relationship and child relationship having a well-defined impact on careers. In fact, this involves women compromising their careers for their family commitments, while growing family commitments stimulate ambition in men (Gilbert, 1985).

Adapting to a new pattern of conjugal roles can be stressful for dual-employed families. As Growler and Legge (1978) say, there is typically a hidden or implicit contract in marriage that is based on the patriarchal assumption that the demands of the husband's career will be given preference and priority. Such contracts are supported by corporation ideology which assumes that male employees have the support of a traditional wife. Stress emerges once the contract is challenged, when two careers have to be accommodated in a single family (Lewis & Cooper, 1989). This is more likely to occur in marriages where a wife's earning and occupational status are higher than that of her husband, leading to a second cause of marital stress. For example, Hiller and Philliber (1982) say that when wives achieve higher occupational status and/or salaries, and have higher career commitments and aspirations than their husbands, considerable tension may be felt by men thus leading to conflict.

Thirdly, the dual-employed lifestyle may be a cause of marital difficulties as the support structure provided by the "homemaker" in traditional families is no longer available (Holahan & Gilbert, 1979). This support argument is partly based on the problem of "a shortage of time" that dual-employed families experience. Specifically, without the support of a full-time "homemaker" the energy of dual-employed family

spouses is often depleted, leaving them little time for one another (Lewis & Cooper, 1989). As the shortage of time is greatest when the couple have young children, it is not surprising that this period is accompanied by the highest levels of marital conflict (e.g., Housenecht & Macke, 1981).

7. **Financial Stress.** Financial stress represented a further category of scress indicated by dual-employed family members. Specifically, 4% of respondents made reference to this category.

Financial worries are a major concern for many families, irrespective of family type (Lewis & Cooper, 1989). In fact, financial reasons such as spiralling inflation and the inequitable rise of salaries is known to affect most adult individuals, besides the highly affluent (Brehm, 1989). The establishment of the dual-employed family is often indicated as a consequence of such financial stress as married women have been encouraged to take up employment in order to share the financial responsibility facing the sole male "breadwinner" of traditional families (Bebbington, 1973; Green & Zenisek, 1983). As Brehm (1989) says, women in South Africa, and probably the rest of the world, no longer work to provide themselves with "pin money" and an interest outside of the home, but rather economic circumstances in South Africa have made the dual-income family a necessity for many.

In addition to working because of economic necessity, the formation of a dual-employed family introduces certain costs that traditional family types do not necessarily face. For example, domestic help and child-care facilities are services that dual-employed families are more likely to pay for. For example, Harrel and Ridley (1975) found that dual-career parents used satisfactory, but expensive child-care services or employed

a nanny or "mother's help", either on a live-in or daily basis, to care for their children. Hertz (1986) found that dual-employed parents preferred the use of hired help at home to other forms of child-care assistance, as parents believed that this arrangement was nearest to the mother-child relationship. However, parents noted the problem of high turnover associated to hired help at home. Hertz (1986) explains this by saying that high turnover is typical of any job that requires few skills and few opportunities for advancement, and draws attention to the pool from which child-minders are drawn, namely, disadvantaged groups including young girls and older women. Hertz (1986) suggests that the solution to the high turnover problem is for professional child-care to be a well qualified, well paid and highly valued occupation, rather than the low status, poorly paid job for which it often is. Many career couples recognise this and, therefore, are prepared to pay high salaries and offer good working conditions (Lewis & Cooper, 1989).

Besides additional costs incurred by dual-employed families, the husband of the dual-employed family generally earns less than husbands who are the sole providers in traditional families (Hayghe, 1982). In addition, women are predominantly employed in clerical, semi-professional and service occupations that offer low pay (Perun & Bielby, 1981). Although, in South Africa the last decade has seen the salary gap between males and females of all race groups narrowed substantially (Brehm, 1989), there is still a need to eradicate pay differentials. Therefore, together with the costs incurred by the dual-employed lifestyle, the general finding that male dual-employed members earn less than their traditional counterparts, and the existence of pay differentials between the sexes, it is clear that dual-employed families are not as affluent as their two salaries imply.

Clearly, from the above, it becomes apparent that stress may be an inevitable consequence of the dual-employed lifestyle. Also, as the dual-employed family is one social development that interacts with other social developments, it is not surprising that external sources of stress affect their attempts to balance work and family demands. Given that stress is a significant aspect of the dual-employed lifestyle, discussion now turns to the statistical analysis of perceived dual-employed family stress, and coping behaviours, and how this impacts on adjustment. Discussion focuses initially on significant findings and then turns to a discussion of non-significant results.

Discussion of Statistically Significant Moderated Multiple Regression Results

Using the statistical technique of moderated multiple regression, the main effects and moderator model through which coping is believed to influence adjustment, was tested. In the previous chapter, the results of moderated multiple regression were presented and it was indicated that support for both effects was obtained. This was indicated through a series of analyses for the perceived degree of stress which were conducted separately for dual-employed family stress as a composite indicator as well as separate analyses for each stress category. The discussion of statistically significant results focuses separately on statistically significant main effects for perceived stress and coping, and then presents a discussion of statistically significant moderator effects for coping.

Discussion of Statistically Significant Main Effects

Dual-employed family stress

The results of the present study showed that perceived dual-employed family stress as a composite measure, indicated a significant main effect in two relationships. These were, firstly, a main effect with job satisfaction, and secondly, a main effect with general psychological health. In both relationships, 4% of the variance in job satisfaction and general psychological health was accounted for. In addition, the analyses of the stressfulness rating of the stress categories indicated five significant main effects. Four of these occurred between the stress category labelled as "role overload": between role overload and job satisfaction (explaining 36% of the variance), between role overload and propensity to leave the organisation (explaining 53% of the variance), between role overload and marital communication (explaining 41% of the variance), and between role overload and general psychological health (explaining 60% of the variance). A fifth significant main effect was indicated between the dual-employed family stress category called "child-care problems" and marital interaction, where 19% of the variance was explained. These findings were found to occur in the predicted direction, that is, perceived dual-employed family stress and stressfulness of different types of stress, showed a negative association with the dependent variables. This means that perceived dual-employed family stress may negatively spill-over onto work attitudes, the marital relationship and psychological health.

The significant main effect of perceived dual-employed family stress and the perceived degree of stress for each stress category on the outcome

indicators of this study, confirms past research. For example, Wiley (1987) found that extensive work/family conflict was negatively related to psychological well-being and Greenhaus et al. (1989) found that work stress was related to time strain (i.e. shortage of time) and role conflict in a sample of dual-earners. Explanations as to why the dual-employed pattern experiences stress lies in the demands faced by the family arrangement. In particular, stress arises from the interplay of work/family roles for <u>both</u> partners (Greenhaus et al., 1989).

The stress main effects also provides support for the idea of reciprocity between work and family roles. Specifically, the present research focused on a family issue (i.e. perceived degree of dual-employed family stress and types of stress) and found significant main effects between this family issue and work attitudes (i.e. job satisfaction and propensity to leave). Barling (1990) writes that the best way to illustrate that family factors influence work functioning is with examples of research on absenteeism. For example, the presence of a sick child at home is consistently related to absenteeism from work, especially for mothers (e.g., Northcott, 1983). The support for reciprocity between work and family roles is consistent with open-systems theory which recognises that neither the family nor work systems are closed systems. Changes in one system would, therefore, influence the other system (Barling, 1990).

Finally, the present study's significant stress main effects confirm the need for specificity in stress research (Appley & Trumbull, 1986). This is said as not all forms of dual-employed family stress were related to all forms of strain included in the analyses. This means, therefore, that perceived dual-employed family stress may affect only some work and family attitudes.

The independent variable, dual-employed family coping, contributed significantly to the variance in propensity to leave the organisation, explaining 2% of the variance. No further significant main effect results were shown between dual-employed family coping and the remaining measures of strain. This significant relationship was found to occur in the predicted direction, that is, a positive relation was indicated. Given that the Propensity to Leave Scale assessed the potential of a subject to stay employed and that the coping scale focused on adaptive coping methods, this means that the use of coping behaviours may influence the intention of a dual-employed member to stay employed.

The present research provides support for a main effect between coping and adjustment. Although past research has indicated mixed support for coping as an additive variable (Felton & Revenson, 1984; Pearlin et al., 1981), the present research offers confirmation of an additive role and explains this effect as occurring without regard to level of exposure to stress (Wheaton, 1982). However, as this effect was not shown in all main effect analyses it provides support for the idea that the role of coping is situation-specific and that the effectiveness of coping may depend on choice of situation and/or outcome indicator (Menaghan, 1983).

The role of coping behaviours in the occupational setting is reported as modest (e.g., Murphy, 1985; Needle, Griffin & Svendsen, 1981; Pearlin et al., 1981; Shinn et al., 1984). Explanation for this is that the resistance of occupational situations to coping efforts may be due to the impersonal organisation of work and the operation of forces beyond the worker's control (Pearlin et al., 1981). As Felton and Revenson (1984)

say "uncontrollability limits the utility of coping efforts directed at the problematic situation" (p. 343).

Therefore, the present study's finding of a main effect of coping on propensity to leave the organisation appears to contradict past research findings as this is an organisational outcome. However, two possible reasons are offered for this, firstly, the measure of propensity to leave the organisation assessed an intention to behave (i.e. to stay employed), as opposed to an attitudinal indicator and, therefore, may be described as more aligned to a behavioural scale. Individual behaviour such as intention to terminate service, is behaviour that is more within an individual's realm of control than altering work conditions so as to change work attitudes. Consequently, the present study's finding of an main effect between coping and propensity to leave the organisation is interpreted as occurring within a situation in which an individual has some degree of control and, therefore, is interpreted as not contradictory to past research findings. A second reason for this result may be that the present research differed from past research in that the form of coping assessed was dual-employed family coping and was not a direct measure of occupational coping efforts. From this, it appears that coping efforts designed to manage lifestyle issues of dual-employed families are related to the propensity of a dual-employed family member to remain employed within a particular organisation.

Discussion of Statistically Significant Moderator Effects

Two significant moderator effects were shown in the present study. The first significant effect occurred between dual-employed coping as a moderator of the perceived dual-employed family stress "overload"/job

satisfaction relationship. The second was indicated between dual-employed family coping as a moderator of the perceived dual-employed family stress "other" and marital interaction relationship. Whereas the first moderator effect operated to increase levels of job satisfaction in times of high stress "overload," the second moderator effect operated to decrease levels of marital interaction in times of high stress "other". This second effect, therefore, operated as a stress enhancer rather than as a stress reducer. A separate discussion of each moderator effect is presented below.

Coping as a moderator of the stress "overload"/job satisfaction relationship

Past research evidence of a moderator effect for coping has been inconsistent (Martin & Lefcourt, 1983). However, where a moderator effect has been shown this effect is explained as dependent on the level of exposure to stress (Finney et al., 1984). Inconsistent moderator effects have been attributed to three factors (Wheaton, 1982). Firstly, past research on coping has used different definitions of coping. Secondly, have varied in their choice of coping indicator, and thirdly, have examined coping behaviours in different stress situations (e.g., surgery, war and natural disasters). The effect of this is that comparisons between significant and non-significant stress-modifying effects are difficult to draw and must be considered in relation to these factors (Wheaton, 1982).

Taking into consideration these three factors, the situation that yielded a significant moderator effect occurred between dual-employed family stress "overload", individual coping strategies and overall job

satisfaction. Dual-employed family "overload" is described as more work than a person can accomplish in the time available (Barnett & Baruch, 1985) and represents the only category in the present analysis with a time and energy focus. The coping strategies assessed referred to individual coping efforts as opposed to group strategies, and were specific to the dual-employed family lifestyle. Job satisfaction measured was a global attitude indicator which assessed satisfaction with intrinsic and extrinsic features of the job. The moderator effect of coping in this situation is illustrated in Figure 1, where different levels of coping did not differentiate between levels of satisfaction for dual-employed family members who reported low levels of dual-employed family stress "overload". But, when high levels of dual-employed family stress "overload" occurred, a moderating effect emerged, where members with high coping were found to indicate higher levels of job satisfaction than those with low levels of coping. These findings are consistent with the belief that coping only functions as a resistance resource in the presence of stressful circumstances (Menaghan, 1983; Wheaton, 1982). This means that when stress "overload" levels are low, coping efforts are not utilised, even if they are potentially available. As they are not utilised in periods of low stress "overload", no moderating effect is detected. However, when levels of stress "overload" increase, coping efforts are mobilised in order to manage the stress. For this reason, dual-employed family members experiencing high levels of stress "overload" combined with high levels of coping, indicated higher levels of job satisfaction than those low on coping efforts.

The potential moderating effect of coping in the relationship between overload and job satisfaction has previously been recognised (e.g., Lang & Markowitz, 1986; Osipow, Doty & Spokane, 1985; Parasuramen & Cleek,

1984; Richard & Krieshok, 1989). However, this relationship has usually been confined to an analysis of work overload and occupational coping efforts. For example, Parasuraman and Cleek (1984) found a significant moderator effect for maladaptive coping behaviours in the relationship between work overload and job satisfaction. The moderator effect of adaptive dual-employed family coping behaviours in the relationship between perceived dual-employed family stress "overload" and job satisfaction has not previously been examined. Therefore, the significant moderating effect of dual-employed family coping may be interpreted as indicating that it has a broad significance as it can extend into the workplace and impact on job satisfaction.

Coping as a moderator of the stress "other"/marital interaction relationship

As previously noted, coping showed a significant moderator effect in the relationship between dual-employed family stress category "other" and marital interaction. The "other" stress category referred to stressors that were not as a direct result of the dual-employed lifestyle, but were events that impinged on the family arrangement, upsetting the balance between work and family demands that had been secured. Unlike the previous significant moderator effect between stress "overload" and job satisfaction, the significant moderator effect of coping exacerbated the negative impact of stress on marital interaction, rather than reducing negative effects. This finding is discussed in relation to past research and some reasons are offered for this result.

Coping refers to acts, both physical and psychological, that individuals take to avoid being harmed by adverse situations (Murphy, 1985). This

implies that failure to make use of coping behaviours may be associated with negative health effects (Burke & Weir, 1980). Consequently, the result of the present study which indicates that individuals experiencing high levels of dual-employed family stress and high levels of coping, exhibited lower levels of marital interaction than those with high levels of dual-employed family stress accompanied by low levels of coping, is contrary to theoretical expectation (see Figure 2,. However, a review of the literature shows evidence of similar findings (e.g., Aldwin & Revenson, 1987; Howard, Rechnitzer & Cunningham, 1975; Kaufman & Beehr, 1986) and offers reasons for this unexpected result.

A possible reason for this unexpected result may lie in the coping inventory used. For example, Aldwin and Revenson (1987) say that many coping scales may omit important coping strategies and thereby overlook important coping efforts. The coping measure included in the present study described individual coping behaviours, but excluded coping efforts made by spouse, family or friends. Indeed, the coping scale began with the words "I cope with the demands of my family by...". As marital interaction is dependent upon both marital partners, the coping efforts of one partner may be insufficient to affect marital interaction. Rather, it appears that future research should assess coping efforts of <u>both</u> marital partners and determine the influence of coping efforts of both partners on marital interaction. In view of this, the present study's result that in times of high stress an high coping, marital interaction decreased may be interpreted as indicating that the other partner's situation may not have allowed for greater marital interaction. For example, the spouse's coping efforts may have been ineffective in times of high stress. Alternatively, relying on individual coping efforts, as opposed to joint coping efforts, may isolate one partner from the other.

In times of low stress, however, coping operated to reduce negative effects, meaning that high coping behaviours were associated with higher levels of marital interaction. Thus it appears that in times of high stress the role of coping in the relation between dual-employed stress and marital interaction may depend on joint coping efforts.

A second reason for this unexpected result may be due to dual-employed family members compromising their marital relationship to their parenting and work commitments. Support for this argument is provided by Hall (1972) who says that one consequence of multiple roles is that they require the establishment of priorities. Further support is offered by Paloma (1972) who found that dual-career female subjects used the coping effort of compromise, although this was generally used to compromise work commitments to the needs of the family. As many dual-employed families are established in South Africa because of economic circumstances which have made the dual-income family a necessity (Brehm, 1989), this may mean that dual-employed family members can no longer afford to compromise their work commitments to their family (including children and spouse), but must establish priorities, and possibly choose parenting and work commitments above that of the marital relationship. The implication of this for coping is that although coping behaviours are being utilised in times of high stress "other", the dual-employed family member may choose to spend more time with children, or on work requirements, which may reduce interaction with the spouse.

Once again, the findings of this research provide support for the importance of specificity in stress research as they indicate that a different direction of effect of coping occurs depending on the type of stress assessed and the outcome measure included.

Discussion of Statistically Non-Significant Results

One of the aims of the present research was to identify the stressors of the dual-employed family and to assess their role in a main effects model. A second aim was to assess dual-employed family coping as a main effect and/or moderator variable. Given these aims, discussion of statistically non-significant results focuses on the limited support found for a significant main effect association between perceived dual-employed family stress and the outcome indicators included, and on the modest support found for coping as a main effect and/or moderator variable.

Statistically Non-Significant Main Effects

Dual-employed family stress

From a potential forty main effects, perceived dual-employed family stress contributed significantly to the variance in the dependant variables in only seven relationships. From this, it is possible to conclude that the establishment of a dual-employed family is not sufficiently stressful to cause any negative psychological and attitudinal consequences. Isolated, dramatic and time constraint incidents of the dual-employed family lifestyle assessed in this study may well be stressful, but the overall dual-employed family lifestyle might not pose a serious threat to the mental and physical health of the dual-employed member. There is research evidence to support this proposition, for example, Lewis and Cooper (1989) say that the stressors of the dual-employed family are no more stressful than those of other family arrangements, but are of a different nature. However, there is a danger of accepting the null hypothesis too readily without consideration

of past empirical evidence (e.g., Lewis & Cooper, 1989; Munton & Forster. 1990; Taylor & Lounsboury, 1988), and recognition of the methodological limitations of the present study.

The present study was an attempt to expand the stress-strain relationship for dual-employed families by including coping behaviours. Although this attempt included a number of important issues, this model is by no means exhaustive. Indeed, there are additional variables that have been indicated as important and which should be represented in future research. For example, one variable is stage in family life cycle. Lewis and Cooper (1987) say that the degree of stress may be dependent on the stage in the family's life cycle. For example, dual-employed parents with young children have been found to exhibit higher levels of stress than non-parent working couples, and couples expecting their first baby (e.g., Lewis & Cooper, 1987). A second variable that may be important is control and flexibility. Sekaran (1986a) says that if workers can exercise some control and flexibility over work schedules, then role overload and role conflict may not inevitably arise. Finally, personality factors such as Type A behaviour pattern may be important. For example, Lewis and Cooper (1987) say that as Type A individuals usually work long hours this may be incompatible with parenting young children in the dual-employed family context.

Methodological limitations of the present study relate to the measure of dual-employed family stress. In particular, the measure of stress was a single item scale where respondents were required to provide an open-ended description of a stressful event and then rate their perception of the severity of the event. Single item scales may be criticised as more detailed accounts of stress might be required. However, as no

dual-employed family stress indicator was known to the author at the time of implementation, and as this method of stress assessment has previously been used (e.g., Aldwin & Revenson, 1987), this method was deemed appropriate. Furthermore, this approach was viewed as consistent with the need for greater specificity in research on stress and coping (Appley & Trumbull, 1986; Singer & Davidson, 1986).

Dual-employed family coping

From a potential five main effects, coping showed a significant main effect in only one relationship, with propensity to leave the organisation. From this it is possible to conclude that coping behaviours of dual-employed family members exert only a modest influence, and that this influence varies according to situational factors. Barofsky (1980) says that the situational factors that are important for coping are: (a) situation, (b) method of measurement, and (c) time period. The situation examined in this study was the dual-employed family context. The measurement choice was, therefore, dual-employed family coping behaviours which included four patterns. However, separate analyses of these four coping patterns was seen as inappropriate as intercorrelations of the coping patterns were unacceptably high (range = .39 - .74). Therefore, the effects of different types of coping could not be assessed. The time period of the present study was one point in time as the research was cross-sectional. Lazarus and Folkman (1984) say that coping should be studied over time so that changes can be observed in what is thought, felt and done as the requirements and appraisal of the encounter change. An analysis of different coping patterns and an analysis of coping over time, may well have indicated stronger evidence for coping as a main effect variable.

Statistically Non-Significant Coping Moderator Effects

The value of a moderator approach is that it makes provision for non-linear relationships. Specifically, a moderator approach allows for the inclusion of additional variables that explain the relationship between an independent and dependent variable (Baron & Kenny, 1986). In the present study, from a potential forty moderator effects, coping showed only two significant moderator effects. One of these was a stress-reducing effect, while the other was a stress-enhancing effect. From this it is possible to say that the limited support for a moderator effect confirms past opinion that the moderator effects of coping have, by and large, failed to appear (e.g., Shinn et al., 1984). Indeed, even in those research studies finding evidence of a moderator effect, the majority of variance still remains unaccounted for (Hovanitz, 1986). It is possible, therefore, to conclude that a more complex relationship may exist between stress, coping and adjustment, and that a number of other variables not assessed may well be important. Variables, for example, such as social support, perceived control and personality factors (Mitchell et al., 1983). Future research needs to focus on variables such as these.

Alternatively, the limited support found of a moderator effect for coping may lie in the distinction between a mediator and moderator variable. Folkman and Lazarus (1988) say that coping is a mediator variable that is generated in a stressful encounter, and changes the relationship between the antecedent and outcome variable. Coping as a moderator, on the other hand, is conceptualised as an antecedent condition that interacts with other conditions in producing an outcome (Folkman & Lazarus, 1988). Empirical support for the role of coping as a mediator or moderator variable is unclear. For example, Folkman and Lazarus (1988)

found support for a mediating effect in the relationship between stressful life events and emotion, while Frese (1986) reports stronger support for a moderating effect in the relationship between work stress and psychosomatic complaints.

Finally, there are situations that prevent the use of coping because of the operation of constraints. Lazarus and Folkman (1984) note two types of constraints: (a) individual, and (b) environmental, and say that these constraints operate to restrict the use of coping by either exceeding the person's ability to cope or by creating additional conflict and distress that prevents coping being used to its fullest extent. Statistically non-significant findings of the present study may be due to the operation of constraints. An example of an individual constraint is that dual-employed families may have many forms of social support at their disposal in a crisis, but be unable to use them because of their perceptions of this support. Specifically, they may decline proffered help because it implies that they are needy or helpless, or place them under obligation. Alternatively, they might distrust the motive behind the help. An example of an environmental constraint is organisational structures which are unresponsive to dual-employed efforts to provide assistance in child-care, through counselling, and work opportunities (e.g., flexitime) (McCroskey, 1982).

Limitations of the Present Study

It was suggested in the discussion of statistically non-significant results that the methodological limitations of the present research may have influenced the findings. Therefore, a discussion of relevant methodological issues may help to further clarify the results found.

These limitations are discussed in terms of the sample, research design, and measurement.

The Sample

One of the limitations of the present research concerns the sample size. Lazarus and Folkman (1984) say that correlational research designs that assess the antecedent variable, the adaptational consequence and the possibility of interaction only once, should preferably use a large sample size. In the present study, 350 questionnaires were distributed to dual-employed family subjects but only 128 useable responses were returned. The sample size of 128 subjects, although statistically a valid sample (using one independent variable and five dependent variables and assuming an average of twenty people per dependent variable), restricts generalisibility and applicability of the findings. In addition, when responses were grouped according to type of stress as indicated through the content analysis procedure (Weber, 1983), the number of subjects per dependent variable dropped to below twenty in many instances (ranging from 5 to 33). As a result, any conclusion drawn from this study must be considered in conjunction with the sample size of the particular analysis.

A second sample-related limitation of the present study concerns the representativeness of the sample. When choosing subjects it was assumed that a representative sample of dual-employed family members from all levels of skill and social standing would be obtained. However, access to dual-employed subjects was difficult to obtain. Firstly, although eight organisations were approached, only two organisations granted permission to implement the research. This possibly reflects a negative organisational attitude to research which focuses on extra-organisational

factors (Lewis & Cooper, 1989). Secondly, access to lower level skilled employees was not permitted in one of the two organisations as management did not grant permission. As a result, the sample of the study was biased in certain respects. For example, most respondents had high levels of education (an average of 14 years), all were White-collar workers, and all subjects belonged to the White population group. Due to the unique situation of the White population group in South Africa, it is possible that dual-employed family stressors and coping behaviours are different in this racial group than in disadvantaged groups. Puckrin (1990) offers evidence of this as it was found that Black career women had to contend with greater transport problems, less readily available day-care services, and greater domestic help problems than White career women.

Research design

A cross-sectional design was used in the present study. This design may be criticised for not permitting inferences about causal relationships as results may support rival hypotheses that deal with reverse paths of causality (Beutell & Greenhaus, 1983; Mitchell & Hodson, 1983). For example, maladjustment may influence the use of coping as opposed to coping influencing maladjustment (Caplan, Naidu & Tripathi, 1984). Thus, while the paths of association in the present study are discussed as unidirectional, it is recognised that the relationship between stress, coping and adjustment might be reciprocal (Mitchell et al., 1983). However, the designation of variables to the role of "dependent" and "independent" variables in the design of the present study was seen as consistent with past research findings (e.g., Alpert & Culbertson, 1987; Benin & Neinstedt, 1984; Billings & Moos, 1981; Harrison & Minor, 1978).

Measurement

Limitations of measurement methodology concerns criticism of the instruments used, and criticism of the procedure used for data collection.

The measuring instruments. One criticism of the measuring instruments of the present research, is that all scales were in English. Given that 65% of respondents' home language was Afrikaans, there is the possibility that subjects may have misunderstood the questionnaires. Indeed, some questionnaires were returned with the open-ended question on dual-employed family stress completed in Afrikaans. However, because English is a widely spoken language and because translation of questionnaires may lead to distortion in meaning (Bulmer, 1983), it was decided to administer the questionnaires in their original form.

Secondly, doubt has been raised about the suitability of some scales where the ranges of responses are truncated (e.g., Bluen, 1986). In the present research, 59% of the scores on the stress measure were located in the top 20% of the scale. As a result, the modest findings may have been due to the limited range yielded by this instrument. As Neale and Liebert (1980) note, if a truncated range is used as opposed to an adequate sample range, then the obtained correlation will be artificially depressed.

Data collection procedure. The present study used only one source of data collection, namely, self-report paper-and-pencil responses. Although all instruments included in the study were psychometrically acceptable, there are certain problems with self-report. For example, self-report assumes that individuals can and will answer questions truthfully and accurately. However, this is not always possible for reasons such as problems of

memory, the desire to present themselves in a positive light, language ambiguity, and the use of defence tactics (Lazarus & Folkman, 1984). Although a form of precaution against such artifacts was taken by using both positive and negative phrasing in some of the items of some of the instruments, and by the anonymity of the questionnaire, on the whole, the data was vulnerable to such inaccuracies.

Second, the research strategy of the present research may be criticised for focusing solely on the individual as a source of data. In particular, an exclusive individual focus raises questions of the validity of inferences (Cohen, 1987). A superior approach is the administration of more objective measures (e.g., physiological indicators and peer and supervisor ratings) in addition to individual assessment (Murphy, 1985). However, in defence of an individual focus, the study of stress, coping and adjustment is dependent on the individual's perceptions of events (i.e cognitive appraisal), and how they are to manage this (i.e. coping). Furthermore, until the findings of stress, coping and adjustment are clear, the preferred solution is to persist with individual analysis and in particular self-report, in order to identify meaningful relationships and rules about the conditions under which they occur. Once an established framework is developed, then the use of more costly behavioural and physiological data is justified (Billings & Moos, 1982).

Summary

A discussion of statistically significant and non-significant results was presented. Within the discussion of statistically significant results it was noted that the perceived dual-employed family stress main effects confirmed past research. Indeed, these results confirmed the idea of reciprocity between work and family life. The main effect between coping and propensity to leave the organisation initially appeared to contradict past findings, but as propensity to leave refers to propensity to stay, and as this was interpreted as more within an individual's control than changing work conditions, this main effect was not interpreted as contradictory to past evidence. The significant moderator effects showed that coping may differentiate between levels of job satisfaction for subjects in times of high perceived stress "overload", but have little influence in times of low stress "overload." Furthermore, the moderator effect of coping between perceived dual-employed family stress "other" and marital interaction, showed that coping may not always have beneficial and positive effects on all forms of family life.

Within the discussion of statistically non-significant results, it was suggested that additional variables, for example, stage in family life cycle, control and flexibility and personality factors, may be important in expanding the stress-adjustment paradigm. Further reasons were suggested through a discussion of the limitations of the study.

Chapter 8

IMPLICATIONS

The findings and limitations of the present research have certain theoretical and practical implications as well as implications for future research. The theoretical implications are presented first, followed by the practical implications. Thereafter the implications for future research are considered.

Theoretical Implications of the Research

Dual-employed Family Stress

The significant relationship found between perceived dual-employed family stress and job satisfaction and perceived dual-employed family stress and general psychological health represents an important finding as it supports empirically the theoretical notion that the dual-employed family lifestyle is potentially stressful and may be related to adverse outcomes (e.g., Hall & Hall, 1980; Rapoport & Rapoport, 1978; Skinner, 1982). The identification of particular types of stressors and their relation to particular types of adjustment is also important as support is provided for the need for greater specificity in stress research. As Appley and Trumbull (1986) say, a stressful event occurs in a situational context, defined (in part) by real time and geographical space. The contexts that emerged as stressful for dual-employed family members were: (a) occupational stress, (b) domestic chore stress (c) child-care problems, (d) role overload, (e) marital difficulties, (f) financial stress, and (g) other (referring to stressors such as ill-health and pregnancy).

However, it was the category labelled as "role overload" that was repeatedly related to the measures of strain. This supports the theoretical notion that dual-employed family members with multiple roles (i.e. worker, parent and spouse) experience difficulty in managing the demands of their roles within the available time (Barnett & Baruch, 1985; Beutell & Greenhaus, 1983).

The significant relationship found between "role overload" and the measures of strain in the present study supports the theory referred to as the scarcity hypothesis (Barnett & Baruch, 1985). This hypothesis rests on two premises: (a) that individuals have a limited amount of energy, and (b) that social structures demand all of an individual's allegiance. As a result, an individual with multiple roles has obligations that are overly demanding, making physical and psychological distress normal. Also, as individuals do not have enough energy to fulfil their obligations, compromises must be made. Therefore, the scarcity hypothesis maintains that the more roles an individual holds, the greater the probability of exhausting the supply of time and energy, and of confronting conflicting obligations leading to physical and psychological distress. However, it must be acknowledged that the scarcity hypothesis has been challenged by the expansion theory (e.g., Thoits, 1983) which emphasises the positive gains acquired from multiple roles.

One further dual-employed family stress category found to be significantly related to an outcome indicator in the present study was "child-care" problems. Specifically, "child-care" problems indicated a significant main effect with marital interaction. Past theory has repeatedly speculated that a major source of stress for dual-employed families is children (e.g., Skinner, 1982), and empirical research has

confirmed this, showing that levels of stress are related to the presence of children (e.g., Lewis & Cooper, 1987), and that child-care problems may affect work attitudes (e.g., Harrel & Ridley, 1975). However, the theoretical implication of the main effect between "child-care" problems and marital interaction is that dual-employed family problems with child-care not only affects levels of stress and work attitudes, but may also impact upon the marital relationship.

In line with open-systems theory, it is widely recognised that occupational stress may be influenced by extra-organisational and intra-organisational factors (Lewis & Cooper, 1989). Therefore, the finding that perceived dual-employed family stress was influenced by extra-organisational and intra-organisational factors is not surprising. However, as the effect of family-related issues on life at work is recognised as the career decision of the new decade (e.g., Hall, 1990), it is important to emphasise that the present research provided new insights into the cross-over effect of work and family. Specifically, this research indicated that perceived dual-employed family stress was associated with the organisational indicator of job satisfaction, and that the perceived degree of stress "overload" was associated with propensity to leave the organisation.

A binomial test indicated that significant differences between male and female subjects occurred for the frequency of reporting of the stress categories of "domestic chore" and "child-care" problems. This is consistent with the literature which shows that although male members are increasingly contributing to domestic chores and child-care, the female still remains responsible for household tasks and child-care (e.g., Gunter & Gunter, 1990; Henwood et al., 1987; Sund & Ostwald, 1985). The

implication of this is that although females are employed, a balanced and equitable redistribution of hometasks and child-care responsibilities between male and female members of dual-employed families, has not occurred. However, as no significant differences were recorded for the remaining stress categories this may support the findings of Yogev (1983) who notes the beginning of a role re-definition process and says the present expansion process might only be a first stage or a preparation for a role re-definition that might arise in the near future. Consequently, significant differences between male and female dual-workers on "domestic chore" stress and "child-care" problems may indicate that these two areas are the final areas in which significant differences between males and females occur, and possibly may not be recorded in the near future as men become more involved in family responsibilities and as women redistribute their traditional tasks

Dual-employed family coping

The relationship assessed in the present study indicated that in some relationships perceived dual-employed family stress and stressfulness of certain types of stress, were related to some of the outcome variables included. However, as this association was not indicated for all relat. ashipa it suggests that the relationship is not uniform, but varies according to the nature of the stressor and/or the presence or absence of additional variables (Wheaton, 1982). The additional variable investigated in this research was dual-employed family coping behaviours as these are believed to ameliorate the impact of stressful experiences (Kessler et al., 1985). The mechanism through which coping is linked to mental health is through a main effects model and a moderator model (Aldwin & Revenson, 1987). A main effect assessment between coping and

the outcome variables included indicated that coping had a main effect on propensity to leave the organisation. A moderator model assessment showed that coping had two moderator effects, firstly, in the relationship between perceived dual-employed family stress "overload" and job satisfaction, and secondly, between perceived dual-employed family stress "other" and marital interaction. However, only the former moderator effect showed a stress-reducing effect, while the latter indicated a stress-enhancing effect.

The theoretical implication of both a main and moderator approach to coping is that the question of whether the impact of coping may vary systematically, either at different levels of dual-employed family stress or for different dual-employed family situational contexts, is addressed. This is both theoretically interesting and practically important. As House (1982) says in developing a parallel argument about the relationships among social supports, situations and outcomes: to the extent that social support (or coping) has largely main effects, everyone would benefit from enhancing those levels, but if it has primary buffering effects, enhancement will be of significant value to people experiencing moderate to high levels of stress, but of lesser, or even no, value to people experiencing little or no stress. From the present study's significant coping findings, it appears that both a main effect and moderator model are operative, implying that by enhancing coping behaviours, regardless of levels of stress, all dual-employed family members would benefit. However, the operation of the main effect and moderator model depends on two conditions: (a) for the main effect, the context is important, and (b) for the moderator effect, both context and level of stress is important. Therefore, these results imply that before addressing coping enhancement efforts for dual-employed families, the

context and level of stressfulness should be investigated as coping in some situations, and at some levels of stress, appears ineffective. For example, the present study showed that at low levels of stress, the moderator effect of coping showed no differences in levels of job satisfaction for dual-employed family members, while at high levels of stress, coping did differentiate between levels of job satisfaction.

The major theoretical implication of this research, however, is that the findings argue against a simplistic interpretation of the relationship between coping and individual, marital and work outcomes. In fact, given the high number of possible main and moderator effects tested, the scattered findings may be attributable to chance fluctuations: certainly replication of such variation is essential. Nevertheless, the results do offer some empirical encouragement and indicate that researchers need at least to entertain the possibility of interactions of stress levels and coping, and of situations and coping, for various dependent variables if evidence of the relationship between stress, coping, and adjustment among dual-employed families is to be found (Menaghan, 1983).

Practical Implications of the Research

The results of the present study provide some evidence that dual-employed family stress impacts adversely on individual, marital and work outcomes. Given that family relationships, individual health and organisations are an integral part of society, the impact of dual-employed family stress must be acknowledged and social structures need to adapt their activities so that they are in congruence with the prevailing family system. Indeed, in the interests of the long-term survival of the family and the organisation, relevant parties must address dual-employed family stress

and in particular work-family conflict. As such, relevant parties need to develop effective individual, family and organisational programmes to ensure their survival and effective contribution to society.

Individual and Family Programmes

At an individual and family level, in order to manage dual-employed family stress, dual-employed families can develop and utilise a support structure as social support may serve to protect individuals from negative consequences of stressful situations (Andrews et al., 1978). Therefore, by developing a strong support structure, whether this be paid labour (e.g., live-in help) or assistance from immediate family members, dual-employed families will receive assistance in balancing the demands of work and family life. Puckrin (1990) writes that strong kinship ties among Black cultures operates to produce this effect in South Africa as grandparents assist with child-rearing. In addition, socialising formally or informally with friends and family in the same situation, may alleviate some of the stress of the dual-employed family lifestyle. This occurs because of the sharing of experiences and solutions (Rapoport & Rapoport, 1978).

Undoubtedly, the strongest support a dual-employed family member can acquire is through spouse support. Indeed, Burke and Weir (1982) found that out of all possible social contacts, both male and female subjects selected their spouse as the person they would most likely turn to for help with their problems. Puckrin (1990) writes that for dual-employed families, spouse support should ideally involve the sharing of roles, however, failing this, dual-employed spouses should at least remain open to compromise and adaptation.

A second means of reducing dual-employed family stress at an individual level, is by means of developing appropriate personality resources (Kessler et al., 1985). Hardiness, a personality construct of three dimensions: (a) a sense of commitment, (b) perceiving events as challenges, (c) and a sense of control over events (Kobasa, 1979), may be an important construct in ensuring effective management of the dual-employed family as it is a stable resource and always available to individuals (Barling, 1990). As many of the stressors of the dual-employed lifestyle have a sudden onset, and occur infrequently (Lewis & Cooper, 1989), they require immediate coping. Hardiness may ensure effective and immediate coping as it is available immediately. Also, hardiness can be developed as a personality resource in individuals (Kobasa & Pucetti, 1982).

A third individual way of overcoming the stressors of the dual-employed lifestyle is to acquire skills of effective time utilisation or management which may be acquired through appropriate training (Lewis & Cooper, 1989). The two key features of time utilisation or management are organising and planning. These two features may operate to compartmentalise work and family demands or alternatively, may ensure that important work and family demands are met (Puckrin, 1990).

Finally, dual-employed family members need to establish time for leisure activities (Puckrin, 1990). Hall and Hall (1980) say that balancing home, work and family demands not only produces uncertainty and lack of control which leads to stress, but also creates a situation that often prevents people from doing the very thing that would help them manage it, that is, taking time to engage in restful and satisfying activities. Puckrin (1990) supports this by noting that the South African dual-career women

interviewed, admitted that they seldom allocated time for the pursuit of their own pleasures and that hobby activities were no longer pursued.

Organisational Programmes

The effectiveness of individual and family coping strategies depends to a certain degree on the responsiveness of the workplace to the family needs of the employee (Lewis & Cooper, 1989). As Erwee (1991) says, organisations must play a proactive role in responding to the needs and expectations of today's workforce, least of which is recognising that policies designed for families with a rigid division of labour are no longer appropriate. Indeed, organisations need to rethink their policies, not only to account for changing family patterns, but also to anticipate the demographic changes predicted for the 1990's (Erwee, 1991). With a major skills shortage crisis facing South Africa (Bryant, 1990), organisations will have to attract unemployed married women as well as men highly involved in family obligations, if they are to recruit and retain high calibre employees. Three issues of the dual-employed family lifestyle that organisations might address are: (1) dependant care, including infants, children, adolescents, and the elderly, (2) work conditions, and (3) corporate mission policies (Rogers & Rogers, 1989).

1. Dependant Care. Dependant care is an organisational issue for the obvious reason that employees cannot come to work unless their dependants are cared for (Rogers & Rogers, 1989). Concerns over dependant care have been shown to affect workers' ability to concentrate on their work and thus have an effect on absenteeism, tardiness, labour turnover and lowered work performance (Bryant, 1990). Therefore, it may be argued that dependant care is as much a problem of the employer as the employee.

Child-care assistance needs vary greatly in any employee population, and most companies have a limited capacity to address them. However, depending on the company's location, financial resources, the age of its workforce and the competitiveness of the labour market, a corporate child assistance programme might include a resource and referral service, whereby the employer may appoint an official, or contract with an agency to provide employees with child-care consultation and make available lists of local child-care resources. Also, the employer may offer financial assistance for child-care or become directly involved, for example, establishing an on-site or off-site company facility (Bryant, 1990). Organisations may also address the needs of working parents with older children by offering existing recreational facilities to provide an after-school or holiday-care service (O'Carolan, 1987). Similarly, organisations can offer assistance to dual-employed families who provide care for elderly relatives by providing a a referral and arrangement service, especially as sudden crises are common place among the elderly (Rogers & Rogers, 1989).

2. **Work Conditions.** The modification of working conditions is a second area that organisations can address, in order to reduce work and family conflict (Bryant, 1990). For example, the option of working reduced hours can be offered so as to decrease the hours parents are separated from children. This includes options such as part-time or shared-posts, longer-day shorter-week, and flexitime or flexiplace work arrangements (O'Carolan, 1987). Puckrin (1990) argues that the literature agrees as to the benefit of flexible working policies which include: (a) increased productivity, satisfaction and less tardiness (e.g., Sullivan, 1984), (b) reduced guilt associated with child-care responsibilities during working

ars (e.g., Cooper & Davidson, 1983), and (c) a general improvement in family life (e.g., Legge, 1982).

Within South Africa, flexible working options are sometimes available to women in semi-skilled occupations such as clerks and typists (Puckrin, 1990). The limited availability of flexible working options has affected the employment of graduate women as they often accept part-time or half-day employment for which they are over-qualified (Legge, 1982). South African organisations need to invest in flexible working arrangements, especially in offering flexible conditions for the highly skilled (Puckrin, 1990).

3. **Corporate Mission Policies.** The validation of family issues is a third area in which organisations may offer practical assistance (Rogers & Rogers, 1989). As a first step, organisations can ensure that managers are aware of the stressors faced by dual-employed families (Lewis & Cooper, 1989). A means of raising management awareness is through management training, for example, dual-employed needs could be discussed in seminars and workshops, where an important function of such exercises may be the exploration of personal and organisational prejudices (Lewis & Cooper, 1989).

A second step towards the validation of family issues, is for dual-employed family employers to adopt an understanding attitude and rid themselves of the prejudice against working mothers (Lewis & Cooper, 1989). Indeed, in South Africa the call has been made for the better utilisation of women, not only in the interests of women and employers, but also for the country as a whole (e.g., Bryant, 1990). A way of showing organ: .ational commitment to the validation of work/family conflict is

through written policies and procedures regarding issues such as flexible working hours, maternity and paternity leave, child-care, and relocation and transfer agreements. In addition, if an employer has an attitude that takes cognizance of the needs of dual-employed families, this should be reflected in recruitment advertising (Puckrin, 1990).

A third corporate mission policy that employers may offer is career development and training, and counselling (Rogers & Rogers, 1989). Of career development, organisations should not limit their focus to individual career planning, but consider couple career planning. Sekaran (1986a) argues that the value of couple career planning is that dual-employed couples may align their career objectives with the organisation's plans, needs and goals. Secondly, of organisational training, organisations can educate employees in dual-employed time management techniques (Puckrin, 1990). This may at first be offered through the company's orientation programme and, thereafter, may be offered through seminars, workshops and training sessions (Gilmore & Fannin, 1982). Thirdly, of counselling, organisations can offer marital counselling for dual-employed couples experiencing marital problems. Organisations can offer assistance either by employing an in-house counsellor, or by referring to an outside resource person. The benefit of adopting this policy is reflected in Hall and Hall's (1979) statement that by making professional help available and cost free, the employer encourages employees to seek help before the problem interferes with work performance. In South Africa, Employee Assistance Programs are offered by many organisations as an intervention technique to employees experiencing social problems (e.g., alcohol and drug abuse). Such programmes may possibly be used to provide professional assistance to dual-employed family members experiencing problems.

The practical implications of the present study are not solely confined to an individual and organisational level, but also extend to other societal structures. For example, trade unions can play a role in promoting organisational accommodation of dual-employed workers (e.g., Pick 'n Pay maternity and paternity agreement). Similarly, the government can be instrumental in assisting working couples. Puckrin (1990) reports that dual-career women in her survey suggested three areas that the South African government can address: (a) a more adequate state subsidy formula for day-care centres with special attention directed at the expansion of day-care centres for non-White children, (b) the revision of taxation law, and (c) a programme of better and more equitable labour practice in South Africa. Finally, at an institutional level, schools can adjust to working parents by confronting issues such as the scheduling of meetings with parents, the expectation of parental involvement in school activities, and before- and after-school care (Puckrin, 1990).

Implications for Future Research

In view of the present study's findings, the limitations and the implications of the research, a number of areas for future research have been identified. These are presented as an agenda for future research on stress, coping and adjustment among dual-employed families.

Future research on stress

The implications for future research that arise from the present study, concern the definition of stress as this definition needs to be recognised as one among several possibilities. Indeed, although not agreeing in detail, virtually all stress investigators now seem to accept a

relational, transactional view of stress, to describe it as a process rather than as a state or outcome, to acknowledge its multi-level, multi-temporal nature, and to recognise the need for multi-disciplinary and inter-disciplinary approaches to its study (Appley & Trumbull, 1986). However, given the many possibilities of measuring stress within this point of view, it is important for future research to consider how findings may vary with differing approaches to the measurement of stress, and to specify the conditions of their study (Menaghan, 1983).

In recognition of the need for specificity in stress research, it became apparent that the key dimensions along which dual-employed family stress is related to negative outcomes varies according to situation and severity in the present study. Therefore, future research should recognise the importance of situation and severity, but realise that other dimensions not assessed in this research may also be important. For example, the dimension of <u>control</u> appears important as problems that can be changed may elicit different coping strategies than those perceived as unalterable (Folkman, 1984; Shin et al., 1984). Similarly, stress that is <u>anticipated</u> or perceived as <u>temporary</u> may also be coped with differently, and <u>degree of ambiguity</u> about what is being faced may also be an important variable (Menaghan, 1983). These dimensions are important because they may not only affect choice of coping behaviour, but also may affect the impact of stress on well-being, or both. Clearly, these issues along with the identification of others, awaits further research.

<u>Future research on coping</u>

There are numerous conceptual and methodological difficulties that have hampered research efforts on coping (Kessler et al., 1985). For example,

one problem is that although many investigators have emphasised the importance of conceptualising coping as a process (e.g., Lazarus & Folkman, 1984), few investigations have been designed to permit an assessment of this process. In most research, coping has been measured by asking respondents to complete a coping inventory identifying all the coping behaviours they used with a particular event or situation, such as occurred in the present research. Obviously, this approach fails to provide information about how the situation was appraised, what coping behaviours were implemented first, the appropriateness of the coping strategy, and the effectiveness of the coping efforts in terms of managing the problem and in alleviating emotional distress. Also, this approach does not clarify whether the person was able to alter or modify the strategy, depending on the situation. Future research needs to direct efforts at capturing the coping process and thereby address the issues mentioned (Kessler et al., 1985). Stone and Neale (1984) have made such an attempt by using daily diaries to collect information about daily events, moods and methods of coping. However, even this more detailed approach fails to consider the accuracy of the subject's appraisal of the situation, the appropriateness of the coping efforts, and the ability of the person to respond to feedback from the environment (Kessler et al., 1985). Clearly, research needs to address the methodological problems of assessing coping as a process and not as a static, stable event (Burke & Weir, 1980).

The present research indicated that situational factors (i.e. context and degree) were important predictors of the use of coping behaviours. However, this research did not include personal factors that lead to appropriate and effective use of coping efforts. Future research should possibly include personal factors as research suggests that underlying

personality dispositions may influence cognitive appraisal and coping efforts (Kessler et al., 1985). In fact, relatively stable clusters of coping dispositions have been isolated empirically, and shown to influence the choice and success of coping behaviours in particular stress situations (e.g., Kobasa & Pucetti, 1982). Subsequent research ought to determine how these dispositions influence coping and in particular, the processes by which they accomplish this (Lazarus & Folkman, 1984).

Finally, research of a cross-sectional correlational nature needs to be supplemented by more long-range assessments (Menaghan, 1983). Long-range assessments will advance understanding of associations identified in cross-sectional correlational designs and enable causal inference to be made (Barling, 1990). Thus, cross-sectional designs need to be supplemented by longitudinal assessments.

By adopting greater specificity in stress research, a process orientation to coping, including situational and personal factors within a longitudinal design, a clearer understanding of the stress-coping-adjustment relationship would be achieved.

Summary and Conclusion

The aim of the present research was to expand the stress-adjustment paradigm by focusing on coping. This was examined within a particular context, namely, the dual-employed lifestyle, as the formation of this family arrangement is recognised as one of the most significant social developments of the mid-twentieth century (e.g., McClean, 1979), and because this family pattern has the potential for considerable stress and strain (e.g., Skinner, 1982). Given that the percentage of married women

has steadily increased over the last thirty years (Gunter & Gunter, 1990), and the major-skills shortage crisis that is predicted for South Africa (Bryant, 1990), the focus on dual-employed families should be an immediate concern for organisational researchers, as well as employers in South Africa.

Using moderated multiple regression, the present study tested the main effects and moderator model through which coping is believed to influence adjustment. Findings show support for both effects, however, this support was not uniform but was shown to vary according to context and level of stressfulness of dual-employed family events. This implies that researchers need to consider context and level of stressfulness for the various dependant variables under consideration, if further information of the form of stress, coping and adjustment among dual-employed families is to be found.

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Appendix 1.

Questionnaire

* The headings for each scale were not included in the questionnaires distributed to subjects.

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Reference: HJK/hm

Enquiries: Ms H Kelly

(011) 726-2320

Date: August 198[illegible]

Dear Dual-Earner Couple Member

Attached you will find a questionnaire which you are kindly asked to complete. This questionnaire forms part of an independent research survey being conducted by a Master of Art Student of the University of the Witwatersrand.

The aim of this research is to learn more about how dual-earner couples (marital relationship in which both husband and wife work) are coping with the demands of their work and family environments. Thus, this questionnaire comprises a number of measures which assess your attitude towards aspects of your job as well as aspects of your family life.

Following discussions with various Senior Managers I have very kindly been granted access to dual-earner couple members of XXXXXX Limited. Although XXXXX will receive a summary of the research findings, individual responses will be unidentifiable. This is because nowhere on the questionnaire are you asked to supply your name and so your response is anonymous and will be treated with the strictest of confidence.

To complete the questionnaire please place a tick or cross in the appropriate answer block. Once completed, please place the questionnaire in the free-post envelope provided and mail it to the University.

It would be appreciated if you would make every effort to complete the questionnaire as each response is highly valued by the University. Also, the more responses we receive the more we learn about how dual-earner couples are coping with the stress of their lifestyle. Knowledge we can impart to you.

/This .....

The University of the Witwatersrand rejects racism and racial segregation. It is committed to non-discrimination particularly in the constitution of its student body, in the selection and promotion of its staff and in its administration.

This questionnaire should only take 10/15 minutes to complete.

All enquiries concerning the research may be made to me at:-

P O Box 1030
Melville
2109

Telephone 726-2320

Thank you for your assistance and support in my research.

Yours sincerely

MS H J KELLY

Please provide the following information:

Age, in years .....

Race .....

Home language .....

Educational Standard .....

Sex: Male/Female .....

Number of children .....

How long have you been married (in years) .....

Position in organisation .....

The Overall Job Satisfaction Scale (Warr, Cook & Wall, 1979).*

STRICTLY CONFIDENTIAL

The first set of questions deals with various aspects of your job. Please read the questions carefully and then place either a tick or cross in the appropriate answer-block.

Here you are asked to tell us how happy or unhappy you feel with each of these listed features of your present job. For example, in Item 1, if you are unhappy with the physical working conditions tick or cross the "I am unhappy" column (1).

	I am unhappy	I am not sure	I am happy
1. The physical work conditions			
2. The freedom to choose your own method of working			
3. Your fellow workers			
4. The recognition you get for good work			
5. Your immediate boss			
6. The amount of responsibility you are given			
7. Your opportunity to use your abilities			
8. Industrial relations between Management and Workers in your company			
9. Your chance of promotion			
10. The way your Company is managed			
11. The attention paid to your suggestions			
12. Your hours of work			
13. The amount of variety in your job			

2/.....

	I am unhappy	I am not sure	I am happy
14. Your job security			
15. Your rate of pay			
16. Taking everything into consideration how do you feel about your job as a whole.			

Propensity to Leave Scale (Lyons, 1971).*

17. How long would you like to stay in this organisation ? (Tick appropriate box)

1 Year	2 Years	3 Years	4 Years	5 Years	More than 10 years

18. If you were completely free to choose, would you prefer to continue working in this organisation or would you prefer not to ? (Tick appropriate box)

Yes	Not sure	No

19. If you had to leave work for a while (for example, because of pregnancy or illness) would you return to this organisation ? (Tick appropriate box)

Yes	Not sure	No

3/.....

Dual-Employed Stress Scale.*

The second set of questions relate to problems and difficulties that you as a member of a dual-earner couple are experiencing.

The first question asks you to identify your dual-earner stress area while the second set of questions asks how you cope with this stress.

Here you are asked to identify and describe the most stressful episode that you as a member of a dual-earner couple have experienced in the last month. This stressful episode may have occurred in either the work or family environment or in both, but must be something stressful that arose as a result of you being a dual-earner couple member. For example, your problem could be childcare or domestic chore stress, work overload or having to turn down a promotion or transfer, marital difficulties or anxiety about working while also having children.

Please identify and <u>describe</u> your stressful area as a result of being a dual-earner couple:-

_____

_____

_____

_____

_____

Please rate how stressful you find this identified problem:-

_____

Extremely Stressful	Very Stressful	Moderately Stressful	Slightly Stressful	No Impact

4/....

Dual-Employed Coping Scale (Skinner & McCubbin, 1981).*

Please read each item carefully, then mark the appropriate box. If the question does not apply to you because you have no child(ren) then please indicate so.

I cope with the demands of our dual-employed family by:-

	Strongly disagree	Moderately disagree	Neither dis-agree or agree	Moderately agree	Strongly agree	No child(ren)
1. Becoming more efficient; making better use of my time "at home"						
2. Using modern equipment (e.g. microwave oven, etc.) to help out at home						
3. Limiting my involvement on the job--saying "no"to some of the things I could be doing						
4. Limiting job involvement in order to have time for my family						
5. Lowering my standards for "how well" household tasks be done						
6. Ignoring comments of how we "should" behave as men and women(e.g. women shouldn't work; men shouldn't clean house).						
7. Deciding I will do certain housekeeping tasks at a regular time each week						
8. Buying convenience foods which are easy to prepare at home						
9. Believing that my working has made me a better parent than I otherwise would be						

5/.....

	Strongly disagree	Moderately disagree	Neither dis-agree or agree	Moderately agree	Strongly agree	No child(ren)
10. Leaving some things undone around the house (even though I would like to have them done)						
11. Eliminating certain activities (home entertaining, volunteer work, etc.)						
12. Ignoring criticisms of others about parents who both work outside the home						
13. Making friends with other couples who are both employed outside the home						
14. Specifically planning "family time together" into our schedule. Planning family activities for all of us to do together						
15. Hiring outside help to assist with our housekeeping and home maintenance						
16. Overlooking the difficulties and focusing on the good things about our lifestyle						
17. Planning for various family relations to occur at a certain regular time each day or week (e.g. "from the time we get home until their bedtime, is the 'children's time").						
18. Eating out frequently						
19. Believing that my working has made me a better spouse than I otherwise would be						

6/.....

	Strongly disagree	Moderately disagree	Neither dis-agree or agree	Moderately agree	Strongly agree	No child(ren)
20. Hiring help to care for the children						
21. Relying on extended family members for encouragement.						
22. Encouraging our child(ren) to be more self-sufficient, where appropriate.						
23. Leaving work and work-related problems at work when I leave at the end of the day						
24. Frequent communication among all family members about individual schedules, needs and responsibilities						
25. Planning for time alone with my spouse						
26. Modifying my work schedule (e.g. reducing amount of time at work or working different hours).						
27. Having friends at work whom I can talk to about how I feel						
28. Negotiating who stays home with an ill child on a "case by case" basis.						
29. Planning work changes (e.g. transfer, promotion, shift change) around family needs						
30. Relying on extended family members for childcare help						
31. Identifying one partner as primarily responsible for childrearing tasks						
32. Believing that we are good "role models" for our children by our both working						

7/.....

	Strongly disagree	Moderately disagree	Neither dis-agree or agree	Moderately agree	Strongly agree	No child(ren)
33. Believing that, overall, there are more advantages than disadvantages to our lifestyle						
34. Planning time for myself to relieve tensions (jogging, exercising, meditating, etc.)						
35. Buying more goods and services (as opposed to "do-it-yourself" projects)						
36. Encouraging our children to help each other out when possible (e.g. homework, rides to activities)						
37. Trying to be flexible enough to fit in special needs and events (e.g. child's concert at school, etc.)						
38. Planning ahead so that major changes at home (e.g. having a baby) will not disturb our work requirements.						
39. Making better use of time at work						
40. Having good friends whom I can talk to about how I feel						
41. Believing that I need a lot of stimulation and activity to keep from getting bored						
42. Believing that, with time, our lifestyle will be easier						
43. Planning schedules out ahead of time (e.g. who takes kid(s) to the doctor; who works late, etc.)						
44. Sticking to an established schedule of work and family-related activities						

8/.....

	Strongly disagree	Moderately disagree	Neither dis-agree or agree	Moderately agree	Strongly agree	No child(ren)
45. Believing that I must excel at both my work and my family roles						
46. Cutting down on the amount of "outside activities" in which I can be involved						
47. Establishing whose role responsibility it is to stay home when child(ren) becomes ill						
48. Maintaining health (eating right, exercising, etc.)						
49. Believing that working is good for my personal growth						

The final three sets of questions deal with certain aspects of your marital relationship as well as with your personal mental and physical health. Please answer as honestly as possible and remember that all responses are anonymous and confidential.

Primary Communication Inventory (Navran, 1967).*

Please mark the box which best represents the extent to which you and your spouse behave in the specified way.

	Very frequently	Frequently	Occasionally	Seldom	Never
1. How often do you and your spouse talk over pleasant things that happen during the day ?					
2. How often do you and your spouse talk over unpleasant things that happen during the day ?					

9/.....

	Very frequently	Frequently	Occasionally	Seldom	Never
3. Do you and your spouse talk over things you disagree about, or have difficulties over ?					
4. Do you and your spouse talk about things in which you are both interested ?					
5. Does your spouse adjust to what he (she) says and how he (she) says it to the way you seem to feel at the moment ?					
6. When you start to ask a question, does your spouse know what it is before you ask it ?					
7. Do you know the feelings of your spouse from his (her) facial and body gestures ?					
8. Do you and your spouse avoid certain subjects in conversation ?					
9. Does your spouse explain or express himself (herself) to you through a glance or gesture ?					
10. Do you and your spouse discuss things together before making an important decision ?					
11. Can your spouse tell what kind of day you have had without asking ?					
12. Your spouse wants to visit some close friends or relatives. You don't particularly enjoy their company. Would you tell him (her) this ?					
13. Does your spouse discuss matters of sex with you ?					

10/.....

	Very frequently	Frequently	Occasionally	Seldom	Never
14. Do you and your spouse use words which have a special meaning not understood by outsiders ?					
15. How often does your spouse sulk or pout ?					
16. Can you and your spouse discuss your most sacred beliefs without feelings of restraint or embarrassment ?					
17. Do you avoid telling your spouse things which put you in a bad light ?					
18. You and your spouse are visiting friends. Something is said by the friends which causes you to glance at each other. Would you understand each other ?					
19. How often can you tell as much from the tone of voice of your spouse as from what he (she) actually says ?					
20. How often do you and your spouse talk with each other about personal problems ?					
21. Do you feel that in most matters your spouse knows what you are trying to say ?					
22. Would you rather talk about intimate matters with your spouse than with some other person ?					
23. Do you understand the meaning of your spouse's facial expressions ?					
24. If you and your spouse are visiting friends or relatives and one of you starts to say something, does the other take over the conversation without the feeling of interrupting ?					

11/.....

Very frequently	Frequently	Occasionally	Seldom	Never

25. During marriage, have you and your spouse, in general, talked most things over together ?

Marital Interaction Scale (20 items from the Daily Checklist of Marital Activities (Wills, Weiss & Patterson, 1974)).*

Please indicate how frequently the following activities occur between you and your husband/wife when you are together.

	Almost always	Often	Sometimes	Seldom	Almost never
1. Spouse greets me affectionately					
2. We watch T.V., listen to music or read together					
3. Spouse criticizes my parents, relatives or friends					
4. Spouse talks too much about work					
5. Spouse is too tired to interact with me					
6. We go on outings together					
7. Spouse is intolerant or uninterested in my feelings or moods					
8. Spouse makes an important decision without consulting me					
9. Spouse is critical of something I say or do					
10. We have a conversation about what we or the children did today					
11. Spouse doesn't really listen to me when I talk					

12/.....

	Almost always	Often	Sometimes	Seldom	Almost never
12. Spouse refuses to talk about something					
13. Spouse is tolerant when I make a mistake					
14. Spouse remains angry or upset about work after coming home					
15. Spouse thanks me for something I did					
16. Spouse is physically abusive to me					
17. Spouse gets angry and won't tell me why					
18. Spouse holds, hugs or kisses me					
19. Spouse compliments me on my looks, actions or ideas					
20. We argue or disagree					

The General Health Questionnaire (Goldberg, 1972).*

Have you recently:-

	Less so than usual	No more than usual	Rather more than usual	Much more than usual
1. Been able to concentrate on whatever you're doing ?				
2. Lost much sleep over worry ?				

13/.....

	Less so than usual	No more than usual	Rather more than usual	Much more than usual
3. Felt that you are playing a useful part in things ?				
4. Felt capable of making decisions about things ?				
5. Felt constantly under strain ?				
6. Felt that you couldn't overcome your difficulties ?				
7. Been able to enjoy your normal day-to-day activities ?				
8. Been able to face up to your problems ?				
9. Been feeling unhappy and depressed ?				
10. Been losing confidence in yourself ?				
11. Been thinking of yourself as a worthless person ?				
12. Been feeling reasonably happy, all things considered ?				

THANK YOU FOR YOUR ASSISTANCE AND CO-OPERATION

Appendix 2.

Linearity Test Results

Table 1

Test of Linearity for the Relationship Between Perceived Dual-Employed Family Stress and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.04	0.04	3/117	0.00 NS
Propensity to Leave	0.03	0.01	3/116	0.80 NS
Marital Communication	0.02	0.00	3/117	0.80 NS
Marital Interaction	0.02	0.01	3/116	0.39 NS
Psychological Health	0.05	0.04	3/116	0.41 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Table 2

Test of Linearity for the Relationship Between Dual-Employed Family Coping and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.10	0.01	10/104	1.04 NS
Propensity to Leave	0.10	0.09	10/109	0.12 NS
Marital Communication	0.03	0.00	10/104	0.32 NS
Marital Interaction	0.05	0.01	10/103	0.43 NS
Psychological Health	0.09	0.00	10/103	1.02 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Table 3

Test of Linearity for the Relationship Between Perceived Dual-Employed Family Stress "Domestic" and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.24	0.08	3/26	1.82 NS
Propensity to Leave	0.16	0.0003	3/24	1.52 NS
Marital Communication	0.14	0.01	3/24	1.21 NS
Marital Interaction	0.13	0.001	3/24	1.19 NS
Psychological Health	0.04	0.13	3/24	-0.75 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Table 4

Test of Linearity for the Relationship Between Perceived Dual-Employed Family Stress "Child-Care" and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.24	0.005	3/10	1.03 NS
Propensity to Leave	0.16	0.02	3/18	1.00 NS
Marital Communication	0.14	0.02	3/18	0.84 NS
Marital Interaction	0.13	0.19	3/10	-0.23 NS
Psychological Health	0.04	0.08	3/10	-0.14 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Table 5

Test of Linearity for the Relationship Between Perceived Dual-Employed Family Stress "Occupational" and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.24	0.05	3/28	2.33 NS
Propensity to Leave	0.16	0.01	3/28	1.67 NS
Marital Communication	0.14	0.0001	3/28	1.52 NS
Marital Interaction	0.13	0.02	3/28	0.18 NS
Psychological Health	0.04	0.04	3/10	0.00 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Table 6

Test of Linearity for the Relationship Between Perceived Dual-Employed Family Stress "Overload" and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.24	0.08	3/6	0.42 NS
Propensity to Leave	0.16	0.02	3/6	0.33 NS
Marital Communication	0.14	0.14	3/6	0.00 NS
Marital Interaction	0.13	0.0004	3/6	0.30 NS
Psychological Health	0.04	0.03	3/6	0.02 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Table 7

Test of Linearity for the Relationship Between Perceived Dual-Employed Family Stress "Marital Difficulties" and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.24	0.43	3/6	-0.50 NS
Propensity to Leave	0.16	0.54	3/6	-0.90 NS
Marital Communication	0.14	0.41	3/6	-0.63 NS
Marital Interaction	0.13	0.02	3/6	0.25 NS
Psychological Health	0.04	0.60	3/6	-0.17 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Table 8

Test of Linearity for the Relationship Between Perceived Dual-Employed Family Stress "Financial" and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.24	0.03	3/0	0.00 NS
Propensity to Leave	0.16	0.12	3/0	0.00 NS
Marital Communication	0.14	0.20	3/0	0.00 NS
Marital Interaction	0.13	0.09	3/0	0.00 NS
Psychological Health	0.04	0.006	3/0	0.00 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Table 9

Test of Linearity for the Relationship Between Perceived Dual-Employed Family Stress "Other" and the Dependent Variables

Dependent Variable	Eta^2	R^2	DF	F-Value
Job Satisfaction	0.24	0.14	3/10	0.44 NS
Propensity to Leave	0.16	0.01	3/10	0.60 NS
Marital Communication	0.04	0.03	3/10	0.03 NS
Marital Interaction	0.13	0.01	3/10	0.46 NS
Psychological Health	0.04	0.03	3/10	0.03 NS

* p < .05
**p < .001
NS = Non-Significant F-Value

Appendix 3.

Statistically Non-Significant Moderated Multiple Regression Results

Table 1

Moderated Multiple Regression for Job Satisfaction on Perceived Dual-Employed Family Stress "Domestic Chore" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2 change	Beta	F
Covariate				
Language	0.02	0.02	0.74	0.59
Stress	0.87	0.85	-1.59	1.86
Coping	0.14	0.73	0.02	1.54
Stress x Coping	0.14	0.00	0.01	0.05

*p < .05

Table 2

Moderated Multiple Regression for Job Satisfaction on Perceived Dual-Employed Family Stress "Child-Care" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2 change	Beta	F
Covariate				
Language	0.23	0.23	-3.08	5.78
Stress	0.26	0.03	-1.90	0.70
Coping	0.28	0.02	0.01	0.47
Stress x Coping	0.28	0.00	0.01	0.03

*p < .05

Table 3

Moderated Multiple Regression for Job Satisfaction on Perceived Dual-Employed Family Stress "Occupational" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2 change	Beta	F
Covariate				
Language	0.06	0.06	3.20	2.19
Stress	0.11	0.05	-7.10	1.41
Coping	0.12	0.01	0.02	0.12
Stress x Coping	0.15	0.03	-0.05	1.18

*p < .05

Table 4

Moderated Multiple Regression for Job Satisfaction on Perceived Dual-Employed Family Stress "Marital Difficulties" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2 change	Beta	F
Covariate				
Language	0.00	0.00	1.26	0.01
Stress	0.09	0.09	-21.56	0.49
Coping	0.14	0.05	-0.46	0.49
Stress x Coping	0.31	0.17	0.14	1.53

*p < .05

Table 5

Moderated Multiple Regression for Job Satisfaction on Perceived Dual-Employed Family Stress "Financial" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2 change	Beta	F
Covariate				
Language	0.65	0.65	8.85	-
Stress	0.96	0.31	-9.89	-
Coping	0.98	0.02	0.38	-
Stress x Coping	1.00	0.02	-0.08	-

*p < .05

Table 6

Moderated Multiple Regression for Job Satisfaction on Perceived Dual-Employed Family Stress "Other" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2 change	Beta	F
Covariate				
Language	0.02	0.02	-5.08	0.35
Stress	0.15	0.13	-14.84	2.15
Coping	0.17	0.02	0.24	0.32
Stress x Coping	0.39	0.22	-0.12	3.69

*p < .05

Table 7

Moderated Multiple Regression for Propensity to Leave on Perceived Dual-Employed Family Stress "Domestic Chore" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Organisation	0.04	0.04	-1.14	1.12
Stress	0.05	0.01	-0.92	0.01
Coping	0.08	0.03	0.01	0.95
Stress x Coping	0.09	0.01	-0.01	0.26

*p < .05

Table 8

Moderated Multiple Regression for Propensity to Leave on Perceived Dual-Employed Family Stress "Child-Care" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Organisation	0.00	0.00	0.04	0.07
Stress	0.02	0.02	-0.74	0.24
Coping	0.07	0.05	0.01	1.11
Stress x Coping	0.07	0.00	0.00	0.02

*p < .05

Table 9

Moderated Multiple Regression for Propensity to Leave on Perceived Dual-Employed Family Stress "Occupational" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Organisation	0.04	0.04	-0.73	0.79
Stress	0.06	0.02	-1.48	0.39
Coping	0.05	0.01	0.05	0.19
Stress x Coping	0.06	0.01	-0.01	0.31

*p < .05

Table 10

Moderated Multiple Regression for Propensity to Leave on Perceived Dual-Employed Family Stress "Marital Difficulties" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Organisation	0.19	0.19	-1.66	2.21
Stress	0.24	0.05	-0.14	0.54
Coping	0.48	0.24	0.05	2.85
Stress x Coping	0.48	0.00	-0.00	0.00

*p < .05

Table 11

Moderated Multiple Regression for Propensity to Leave on Perceived Dual-Employed Family Stress "Financial Difficulties" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Organisation	0.12	0.12	-4.30	-
Stress	0.18	0.06	-2.70	-
Coping	0.99	0.81	0.08	-
Stress x Coping	1.00	0.01	0.01	-

*p < .05

Table 12

Moderated Multiple Regression for Propensity to Leave on Perceived Dual-Employed Family Stress "Other" and Dual-Employed Family Coping

Variable entering equation	R^2	R^2change	Beta	F
Covariate				
Organisation	0.14	0.14	-3.63	1.88
Stress	0.14	0.00	3.46	0.00
Coping	0.19	0.05	0.07	0.67
Stress x Coping	0.25	0.06	-0.02	0.77

*p < .05

Table 13

Moderated Multiple Regression for Marital Communication on Perceived Dual-Employed Family Stress and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.00	0.00	-3.11	0.29
Coping	0.01	0.01	-0.08	0.43
Stress x Coping	0.08	0.07	0.01	0.23

*p < .05

Table 14

Moderated Multiple Regression for Marital Communication on Perceived Dual-Employed Family Stress "Domestic" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.01	0.01	-22.83	0.24
Coping	0.02	0.01	0.43	0.44
Stress x Coping	0.11	0.09	-0.12	2.50

*p < .05

Table 15

Moderated Multiple Regression for Marital Communication on Perceived Dual-Employed Family Stress "Child-Care" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.02	0.02	-7.35	0.33
Coping	0.07	0.05	-0.02	1.12
Stress x Coping	0.08	0.01	0.04	0.24

*p < .05

Table 16

Moderated Multiple Regression for Marital Communication on Perceived Dual-Employed Family Stress "Occupational" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.00	0.00	-24.04	0.00
Coping	0.00	0.00	-0.57	1.13
Stress x Coping	0.09	0.09	0.15	2.60

*p < .05

Table 17

Moderated Multiple Regression for Marital Communication on Perceived Dual-Employed Family Stress "Marital Difficulties" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.14	0.14	-36.35	1.73
Coping	0.27	0.13	-1.03	1.54
Stress x Coping	0.41	0.14	0.24	1.66

*p < .05

Table 18

Moderated Multiple Regression for Marital Communication on Perceived Dual-Employed Family Stress "Financial" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.20	0.20	-19.84	0.27
Coping	0.22	0.02	0.70	0.03
Stress x Coping	0.25	0.03	0.15	0.04

*p < .05

Table 19

Moderated Multiple Regression for Marital Communication on Perceived Dual-Employed Family Stress "Other" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.03	0.03	-20.49	0.51
Coping	0.07	0.04	0.27	0.70
Stress x Coping	0.32	0.25	0.14	4.00

*p < .05

Table 20

Moderated Multiple Regression for Marital Interaction on Perceived Dual-Employed Family Stress and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.19	0.19	-2.51	0.77
Coping	0.24	0.05	-0.07	0.78
Stress x Coping	0.29	0.05	0.01	0.10

*p < .05

Table 21

Moderated Multiple Regression for Marital Interaction on Perceived Dual-Employed Family Stress "Domestic" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.00	0.00	-8.21	0.08
Coping	0.02	0.02	0.13	0.30
Stress x Coping	0.03	0.01	-0.04	0.34

*p < .05

Table 22

Moderated Multiple Regression for Marital Interaction on Perceived Dual-Employed Family Stress "Occupational" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.02	0.02	-6.45	0.64
Coping	0.03	0.01	-0.19	0.09
Stress x Coping	0.04	0.01	-0.05	0.35

*p < .05

Table 23

Moderated Multiple Regression for Marital Interaction on Perceived Dual-Employed Family Stress "Marital Difficulties" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.00	0.00	-26.54	0.00
Coping	0.14	0.14	-0.72	1.21
Stress x Coping	0.19	0.05	0.15	0.48

*p < .05

Table 24

Moderated Multiple Regression for Marital Interaction on Perceived Dual-Employed Family Stress "Overload" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.02	0.02	-72.61	0.77
Coping	0.07	0.05	-1.67	0.01
Stress x Coping	0.46	0.39	0.46	4.32

*p < .05

Table 25

Moderated Multiple Regression for Marital Interaction on Perceived Dual-Employed Family Stress "Financial" and Dual-Employed Family Coping

	R^2	R^2change	Beta	F
Stress	0.09	0.09	-88.38	0.42
Coping	0.52	0.43	2.51	1.93
Stress x Coping	0.78	0.26	0.57	1.13

*p < .05

Table 26

Moderated Multiple Regression for Psychological Health on Perceived Dual-Employed Family Stress "Domestic" and Dual-Employed Family Coping

	R^2	R^2 change	Beta	F
Stress	0.09	0.09	-4.74	2.48
Coping	0.13	0.04	-0.12	1.20
Stress x Coping	0.15	0.02	0.02	0.10

*p < .05

Table 27

Moderated Multiple Regression for Psychological Health on Perceived Dual-Employed Family Stress "Child-Care" and Dual-Employed Family Coping

	R^2	R^2 change	Beta	F
Stress	0.08	0.08	-9.30	2.07
Coping	0.21	0.13	-0.06	3.35
Stress x Coping	0.26	0.05	0.04	0.23

*p < .05

Table 28

Moderated Multiple Regression for Psychological Health on Perceived Dual-Employed Family Stress "Occupational" and Dual-Employed Family Coping

	R^2	R^2 change	Beta	F
Stress	0.04	0.04	-9.62	1.00
Coping	0.04	0.00	0.03	0.17
Stress x Coping	0.08	0.04	-0.07	1.19

*p < .05

Table 29

Moderated Multiple Regression for Psychological Health on Perceived Dual-Employed Family Stress "Marital Difficulties" and Dual-Employed Family Coping

	R^2	R^2 change	Beta	F
Stress	0.03	0.03	-10.04	0.27
Coping	0.13	0.10	-0.25	0.83
Stress x Coping	0.15	0.02	0.05	0.13

*p < .05

Table 30

Moderated Multiple Regression for Psychological Health on Perceived Dual-Employed Family Stress "Financial" and Dual-Employed Family Coping

	R^2	R^2 change	Beta	F
Stress	0.01	0.01	-93.78	0.19
Coping	0.40	0.39	2.56	13.48
Stress x Coping	0.97	0.57	-0.56	19.22

*p < .05

Table 31

Moderated Multiple Regression for Psychological Health on Perceived Dual-Employed Family Stress "Other" and Dual-Employed Family Coping

	R^2	R^2 change	Beta	F
Stress	0.03	0.03	-3.30	0.31
Coping	0.07	0.04	0.00	0.54
Stress x Coping	0.08	0.01	0.01	0.09

*p < .05

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