

Exploring the mediating role of coping in the work-family conflict and job strain relationship: a study of female educators in schools across the iLembe region.

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DECLARATION

I, Daphne Pillay declare that this dissertation is my own work and that sources of information have been acknowledged accordingly. I also declare that this dissertation has not been submitted for candidature of any other degree in any other university.

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ABSTRACT

Job strain, work-family conflict and coping strategies in a sample of female educators (N=107) were explored in the present study. The study also included an examination of the relationship between job strain, work-family conflict and coping strategies. The study made use of the work-family conflict scale which measures the levels of work-to-family conflict and family-to-work conflict (WFC). The Teacher Stress Measure (TSM) was used to measure the levels of teacher strain. In addition, the Coping Orientation for Problem Experienced (COPE) questionnaire was used to measure the various coping strategies utilised by female educators. Results of study revealed that female educators experienced high levels of work-to-family conflict and low levels of family-to-work conflict. In addition, the total work-family conflict scale and the work-to-family conflict subscale was found to have a positive relationship with job strain. The results of the current study offered no support for the mediating role of coping in the job strain and work-family conflict relationship.

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CHAPTER ONE: INTRODUCTION

A widespread assumption about teaching as an appropriate occupation for women is that it has many characteristics that are particularly considerate of family needs and restraints (Cinamon & Rich, 2005). These characteristics which include a fairly short day at the job site and no work during school holidays are said to result in a reduced work load. Oliver and Venter (2003) claim that these job conditions permit teachers to meet their work duties, without major disruptions to family functioning. These presumed characteristics of teaching make it an idyllic job for women who want to dedicate themselves to their families (Yildirim & Aycan, 2008).

The South African teaching environment, however, presents a contradictory reality. In addition to balancing both work and family roles, South African educators are faced with additional challenges which have resulted in the workload of educators constantly increasing. South African authors (Barkhuizen & Rothmann, 2005; Pienaar & Rothmann, 2003) argue that an increasing number of educators are attributing the degradation of the teaching workforce to an overwhelming amount of job-related strain. Studies in the field of job strain among educators (Moodley, 2001; Oliver & Venter, 2003) support the argument that common causes of educator strain include taking on too many responsibilities in the work day and increased pressure to meet time demands at work. The added pressure on educators often results in an attempt to devote more time towards work demands thus neglecting the demands made by the family role (Cinamon & Rich, 2005). In an attempt to reduce the feelings of guilt that arise from neglecting the family role many female educators will begin to devote more time to the family role thus in effect neglecting the work role (Karimi, Jomehri, Asadzade & Sohrabi, 2012). It is therefore not surprising to find that work challenges are beginning to impact on one's family life and that

family challenges are beginning to impact on one's work life. This cycle has strain-inducing consequences and is expected to result in a substantial increase in destructive outcomes such as, psychological distress, absenteeism, physical illness and poor work performance (Griffith, Steptoe & Copley, 1999).

In an attempt to examine the extent and cause of stress among South African educators, Oliver and Venter (2003) concluded that, excessive pressure from the work and family roles of female educators is expected to result in the neglect of both personal priorities and work responsibilities. This is known to create conflict among work and family roles. In a research study conducted by Allen, Herst, Bruck, and Sutton (2000) results have validated the above mentioned finding by revealing a consistent negative relationship between work-family conflict and three types of outcomes: work-related outcomes, non-work-related outcomes, and strain-related outcomes. However, their analysis was confined to one dimension of the work-family conflict component, which was work-to-family conflict. A noticeable trend in the field of work-family conflict research is that studies neglect the bi-directional nature of work-family conflict. A reason for considering both directions of the work-family conflict component is that the prevalence of interrole conflict is reported to vary, with work-to-family conflict being more prevalent than family-to-work conflict (Shimazu, Bakker, Demerouti & Peeters, 2010). Therefore, it is important to differentiate between work-to-family conflict and family-to-work conflict so that there may be a better understanding of the different mechanisms underlying these interrole conflicts (Amstad, Meier, Fasel, Elfering, & Semmer, 2011).

Taking the above into consideration, research has attempted to understand the impact of the work role on the family role and the impact of the family role on the work role (Casper, Eby, Bordeaux, Lockwood & Lambert, 2007; Yildirim & Aycan, 2008). However, most of the

research conducted on work-family conflict focuses on demanding managerial and non-traditional professions (Spangenberg & Orphen-Lyall, 2000). There is a common misconception that women in occupations such as, commerce, law and medicine spend longer hours on the job site and therefore experience higher levels of work-family conflict making them popular targets for work-family-conflict studies (Yildirim & Aycan, 2008). This has resulted in the education profession being neglected in work-family conflict studies. However, research conducted by the South African Department of Education (2005) has indicated that given that women are the primary targets of work-family conflict studies, it is only appropriate that the teaching profession form an integral part of such research due to the high female makeup of the profession. KwaZulu-Natal contains 21.5 % of South Africa's population of educators with 14.9% of these educators being female. The Department of Education reports that 70 % of the country's educators are female and due to the feminization of the South African work-force this is number is expected to increase (South African Department of Education, 2005). This suggests that the teaching occupation is a potential target for work-family conflict studies.

Authors in the field of stress/strain and coping (Kesari, 2012; Pienaar & Rothmann, 2003) suggest that the experience of stress in relation to conflict between work and family roles can be mediated by coping strategies. The literature on coping strategies (Barkhuizen & Rothmann, 2005; Jacobsson, Pousette & Thylefors, 2001) suggests that coping strategies can play an important role in assisting educators to balance the pressures of employment and the demands of the family roles. However, within the South African context very few studies have attempted to analyse the role of coping as a mediator. Instead, studies have focused on coping solely as a moderator in the work-family conflict and job strain relationship (Pienaar & Rothmann, 2003; Spangenberg & Orphen-Lyall, 2000). A moderator variable is one that affects the relationship

between two variables, so that the nature of the impact of the independent variable on the dependent variable varies according to the level or value of the moderator. A mediator specifies how (or the mechanism by which) a given effect occurs and is defined as the mechanism through which one variable influences or is linked to another variable (Holmbeck, 1997). The failure of studies to explore the processes behind certain mechanisms that can alter the strain and work-family conflict relationship results in a lack of clarity concerning the role of coping as a mediator. In this study coping skills will be explored as the mechanism which links the job strain and work-family conflict relationship. In addition, the current study differs from existing research in the field of stress and coping as it focused on an array of coping strategies that are employed by educators. Previous studies (Pienaar & Rothmann, 2003; Van der Colff & Rothmann, 2009) have limited their exploration of coping strategies to the problem-focused and emotion-focused categories. This suggests that a host of other strategies that might be employed by educators remain unknown.

1.1 Context of teaching in South Africa

Teaching has become globally accepted as a female-dominated profession that is practiced under demanding working conditions (Oliver & Venter, 2003). According to Black and Hosking (1997) “South African government departments that are responsible for primary and secondary education have painted themselves into somewhat of a tight corner” (pp, 232). Education departments are facing budget constraints, which appears to be destroying the incentive to teach. Black and Hosking (1997) go on to argue that in an attempt to cater for these budget limitations, the South African Department of Education has developed so-called ‘remedying’ policies and regulations. However, these policies and regulations have inadvertently given rise to a whole

new set of stressful factors that tend to exacerbate educators experience of job strain. This limits the educator's ability to perform at a reasonably efficient level.

In addition, constant curriculum changes, large learner-to-teacher ratio and time constraints have been identified as some of the major sources of job strain among South African educators (Moodley, 2001). Since the democratic dispensation of 1994 the South African government has placed importance on the provision of education for all children. The added emphasis on quality education has placed pressure on the education system. Given that educators play a pivotal role in this system there is an added pressure placed on educators. Although the South African government is dedicated to providing quality education, the situation reflects a different reality. The state of the South African teaching environment is discussed below:

- Constant curriculum changes:

According to Crouch (2003) education in South Africa has been subject to several changes in its structure over the last few years. According to the South African Council for Educators, “the South African education system is in a transitional state and change is the order of the day” (2011, p 3). These changes are due to a variety of factors which include: the merger of old departments of education, the adoption of new processes by the provincial departments regarding retrenchments and recruitments, changes in the framework of teachers qualifications and most importantly, constant changes in the schooling curriculum (South African Council for Educators, 2011). These changes place extreme pressure on educators to constantly adapt to their new work environments. According to the “Teachers For All” report produced by the South African Council for Educators (2011), all South African schools were instructed to operate according to the ‘Curriculum 2005’ which was the name given to the National Curriculum Framework that

dominated South African schools. This framework was designed according to the Outcomes Based Education philosophy commonly known to all as OBE (Crouch, 2003). Since its implementation, Curriculum 2005 has since been revised and amended several times. In 2012 this framework was presented as the Revised National Curriculum Statement. The new curriculum provides a comprehensive outcome and assessment standard that stipulates the knowledge and skills required for each grade (Crouch, 2003). In 2013 the South African Department of Education took further steps to implement a new and revised curriculum referred to as the Continuous Assessment Policy Statement (CAPS). Educators are now forced to unlearn years of applied policy and migrate to a completely new system of teaching. The South African Department of Education further stipulated that, there is an urgent need for a redefinition of the type of teacher needed to cater for the needs of the new curriculum.

- Large learner-to-teacher ratio

According to Moodley (2001) the classroom has been identified as a source of tension and strain among educators. In South African public schools each classroom contains on average 40-50 learners each with their own personality, expectations, problems, preferences and each one of them clamouring for the educator's attention. The educator's workday is occupied with balancing various activities which include control of learners, achieving daily teaching requirements and catering for individual needs of learners. This general work situation is compounded by numerous factors which include poor equipment, overcrowding and devoting extra time to teaching outside work hours (Moodley, 2001). The issue of exceedingly high learner-teacher ratios has constantly surfaced in literature that strives to understand the reasons for educator strain (Kyriacou, 2001; Moodley, 2001; Oliver & Venter, 2003). According to the National Department of Education, in 2003 there were 13 711 456 learners registered in the

South African Education system (Crouch, 2003). Statistics reveal that Kwa-Zulu Natal reported the largest number of learners, which was 13 times larger than the biggest province, the Northern Cape. Shockingly, the total number of educators for the 2003 schooling year in Kwa-Zulu Natal was a meagre 366 320. This large difference suggests that educators were required to cater for a classroom of learners that far exceeds the rate required for optimal working conditions. Closely related to the learner-teacher ratio, is the issue of learner discipline. According to Moodley (2001) some of the behaviours that learners manifest begin to generate strain among educators. In a study by Jackson and Rothmann (2005) educators expressed concern about the fact that learners do not obtain satisfactory results and attribute this to the lack of learner discipline. This is known to have adverse effects on educators who begin to experience feelings of incompetence, as they cannot meet the needs of all learners. Due to the excessive strain upon educators there has been an increase in educator attrition which is evident by the high retirement and resignation rates between 2002 and 2005 (South African Council for Educators, 2011).

- Time constraints

In an examination of the South African teaching environment, Oliver and Venter (2003) revealed that expenditure of resources such as wasting of time during a school day to control learners, as well as being unable to complete the days tasks were among the main contributors to work related strain. Kyriacou (2001) found that neglecting personal priorities because of time demands at the workplace was one of the main factors that educators found distressing. Due to the large learner numbers South African educators spend long hours at the job site, helping with extra mural activities. This means that many educators are being forced to do their preparation and marking at night. This takes away from family related time (Oliver & Venter, 2003). The demanding workload and excessive time constraints have resulted in more pressure being placed

upon educators. Oliver and Venter (2003) go on to add that the issue of time pressures has placed extreme burden on female educators as they begin to experience feelings of guilt due to the neglect of their family roles. This is expected to result in increased job-related strain.

1.2 Conceptual definition of terms

JOB STRAIN: According to Kyriacou (2001) teacher stress/strain is defined as the experience of unpleasant, negative emotions, such as anger, anxiety and tension that give rise to both psychological and physiological effects. These effects have been noted to have a strong relationship with job satisfaction and job performance of educators. Moodley (2001) states that, with regards to the teaching profession, strain is often a response to stressors stemming from factors within the school environment such a structure of the job as well as factors external to the school environment such as family support. Research indicates (Kyriacou, 2001; Moodley, 2001) that due to the fact they often arise from the same sources; both stress and strain have been used interchangeably in the literature. For the purpose of the current study the terms stress and strain will be used interchangeably.

WORK-FAMILY CONFLICT: According to Netemeyer, Boles, and McMurrin (1996, p. 410) work-family conflict reflects the degree to which role responsibilities from the work and family domains are incompatible, that is, "participation in the work role is made more difficult by virtue of participation in the family role and vice versa. In addition, work-to-family conflict refers to "a form of interrole conflict in which the general demands of, time devoted to, and strain created by the work role, interferes with performing family-related responsibilities". Family-to-work conflict on the contrary refers to "a form of interrole conflict in which the general demands of, time devoted to, and strain created by the family role interferes with performing work-related

responsibilities’’ (Netemeyer et al., 1996, p. 410). These definitions have been selected as they address the relevant concepts the researcher wishes to explore. The work-family conflict scale used in this study is comprised of 3 components. The total work-family conflict scale is made up of 10 items: the work-to-family conflict subscale (5 items) measures the levels of work-to-family conflict and the family-to-work conflict subscale (5 items) measures the levels of family-to-work conflict. These terms will be used through the rest of the study.

COPING: According to Folkman and Moskowitz (2004) coping can be defined as the thoughts and behaviours that are used to manage the internal and external demands of situations that are appraised as stressful. Pienaar and Rothmann (2003) provide a comprehensive definition of coping, defining it as the mental and behavioural efforts that individuals use to manage situations evaluated as potentially harmful or stressful. The current study has adopted this definition in explaining the concept of coping. Coping has been categorised in a number of different ways: emotion-focused vs. problem-focused; approach-avoidance; adaptive-maladaptive (Thompson et al., 2010). In order to better understand the dynamics of coping, the study has adopted the prominent classification of coping dimensions styles as posited by Lazarus and Folkman (1984). The first classification style includes the problem-focused coping dimension. This coping dimension is aimed at problem solving or doing something to alter the source of the strain-inducing factor. The second classification entails emotion- focused coping which is aimed at alleviating or managing the emotional anguish that is associated with the strain inducing factor. Although both problem-focused and emotion-focused coping have been identified as broad dimensions of coping, research has indicated that there are more distinct strategies of coping that can be found within these dimensions. The current study will also attempt to identify the more

specific strategies within the broad categories of problem- focused and emotion- focused coping dimensions.

TEACHERS/EDUCATORS: The term teacher/educator is used to represent a member of the teaching profession that has been in the profession for a period of one month or longer. This includes principals, deputy principals, head of departments, deputy principals as well as level one educator. The rationale for using educators who have been in the profession for more than a month is that a month of service in the teaching profession is considered sufficient time for an individual to experience the strain related effects of the profession. For the purpose of the current study the terms educator and teacher will be used interchangeably.

1.3 Job strain in teaching

Research done within the South African context suggests that teacher strain is steadily increasing (Engelbrecht, Forlin, Eloff & Swart, 2001; Jackson & Rothmann, 2005). This could have serious implications for the physical and mental well-being of educators (Kesari, 2012). South African statistics indicate that teachers hand in more medical insurance claims than other persons in professional occupations (Black & Hosking, 1997). In a study conducted by Moodley (2001) results revealed that educator burnout and stress related effects are constantly on a rise. Educators also report a four year shorter life expectancy than that of the national average (Engelbrecht et al., 2001). To exacerbate the dilemma of the degradation of the teaching work force it has been argued that the number of educators being prepared in South African universities is inadequate to meet the demands over time. The South African Department of Education (2005) argues that, the lack of interest in the teaching profession as a career is due to the high levels of stress and strain experienced by educators already in South African schooling

system (Ngidi & Sibiya, 2002). The negative reputation that the teaching profession has earned is probably due to the alarming levels of stress and strain that serves as a warning to potential educators. According to Spangenberg and Orphen-Lyall (2000) a significant number of teachers perceive the educational workplace as stressful. Kyriacou (2001) argues that although primary strain-inducing factors have been identified, the main sources of job related strain experienced, is unique to the individual. The experience of strain is dependent on the precise complex interaction between an individual's personality and circumstances (Van der Colff & Rothmann, 2009). The current research study argues that, although there are common stressors experienced by individuals in the education profession there are also factors that are individually specific such as personality and coping strategies that either exacerbate or lessen the degree to which strain is experienced. A variety of coping strategies are employed by individuals in an attempt to mediate the effects of job related strain. According to DeLongis and Holtzman (2005) the coping strategies employed vary according to the individual's personality as well as the dynamics of the situation. These strategies include problem-focused strategies, emotion-focused strategies, religion, meaning focused coping strategies, disengagement and a host of other strategies (Folkman & Moskowitz, 2004). These strategies are known to enter the relationship between the conflict-inducing variable and the stressor and alter the outcomes of the relationship (Holmbeck, 1997). In this way, it can be argued that although research indicates detrimental outcomes of job-related and work-family conflict there are factors that may mediate the above mentioned relationship. The current research study adopts the above mentioned argument in understanding the mediating effects of coping strategies.

1.4 Work-family conflict among teachers

According to Yildirim and Aycan (2008) women's participation in the workforce is increasing all over the world. The feminization of the labour force has led to changes in the work roles of both males and females. Authors argue (Casale & Posel, 2005; Yildirim & Aycan, 2008) that more women are entering the world of work and that they are now valuing the work role more than that the family role. The authors state that the feminization of the workforce is a result of an influx of females into the field of human services such as teaching and nursing. These changing values and priorities have resulted in an increased level of interrole conflict among working women. It has been argued that, interrole conflict is a result of women being expected by society to fulfil a host of roles which include that of mother, wife and educator. This demanding environment results in work-family conflict in which work and family roles begin to compete for the individual's time, energy and resources (Panitik et al., 2012). Unfortunately, evidence that supports the argument made above has been conducted on male dominated professions including crime prevention, managerial positions and engineering (Karatepe & Kilic, 2007; Frye & Breugh, 2004) neglecting female-oriented occupations. A common misconception in the field of organizational studies is that teachers are not perceived to be a valuable target for work-family conflict studies because they are expected to experience low levels of work-family conflict due to the supposed undemanding nature of the job (Panitik et al., 2012). While some research proposes that female educators place less emphasis on their work roles (Cinamon & Rich, 2005), there is no concrete evidence that teachers have minimal commitment to their work or experience low levels of conflict between work and family roles. Research (Moodley, 2001) suggests that teachers place high emphasis on their work and that the teaching role is prominent in the personal character of many educators. Furthermore, the high value attributed to the work role

indicates that many women are unable to separating their professional and family roles successfully (Wallis & Price, 2003).

1.5 Coping skills among teachers

A substantial body of evidence highlights the detrimental effects of the work-family conflict and job strain relationship. Such literature (Spangenberg & Orphen-Lyall, 2000) emphasizes the need for investigation into mechanisms that educators can use to mediate this relationship. However, although the effects of the job strain and work-family conflict relationship may be universal, Delongis and Holtzman (2005) suggest that no individual is the same and therefore no two educators will respond in the same way to strain. To substantiate this, the authors argue that females display a tendency to follow more inactive strategies of coping with strain, whereas men display a preference towards more active strategies. This is primarily due to the fact that coping behaviours are influenced by cultural stereotypes, in which females are encouraged to be passive and deal with their problems on their own (DeLongis & Holtzman, 2005). As mentioned, there is a need to challenge these misconceptions due to the change in gender roles since the feminization of the labour force. Furthermore, although there are studies investigating coping strategies (Lazarus, 1991; Spangenberg & Orphen-Lyall, 2000) among females, there is a lack of research conducted on the coping styles and on coping as a mediator between educator strain and work-family conflict. This gap in the literature needs to be addressed especially in the context of the high rate of early retirement and sick leave in the education sector. If there is any movement towards the alleviation of job-related strain among South African educators there is a need for an investigation into coping strategies that may serve as a tool to influence job-related strain among educators.

1.6 Rationale for the study

The existing body of knowledge generated around job-related strain, work-family conflict and coping strategies is largely from an international perspective. Furthermore, due to the supposed undemanding nature of the teaching profession there has been little effort to examine the phenomenon of work-family conflict among female educators. Moodley (2001) states that in the study of work-related stress among educators, it is important for researchers to display sensitivity towards contextual factors unique to the South African environment. A review of literature reveals limited attempts to examine the relationship between job strain, work-family conflict and coping among South African educators. The current research study has been motivated by this gap in South African literature. Furthermore, a primary motivation for this study is the feminization of the South African workforce. As mentioned earlier, due to the increase in the South African workforce in which teaching plays a major role, it is important to become aware of how South African educators experience both their work and family roles. Hence, specific attention has been placed on female educators as it is expected that they would display higher levels of work-family conflict in attempting to balance both work and family roles.

Furthermore, the literature suggests that given the highly structured workday and the constant interaction with both students and colleagues, educators are expected to experience a substantial amount of job-related strain that has not yet been documented (Griffith., et al 1999; Moodley, 2001). It has been acknowledged that maintaining low levels of educator stress has various benefits for the South African education system. High levels of educator strain are expected to manifest in poor job performance which results in feelings of incompetence and low self-efficacy among educators which triggers a cycle of strain. According to Barkhuizen and Rothmann (2005) the effects of teacher stress are known to impact on learners as well. The authors assert

that increased levels of educator stress have been associated with poor learner performance and a decrease in learner motivation. Educators who experience job-related strain begin to lose their incentive to teach and this manifests itself in a poor response from learners who begin to feel neglected. Given the negative consequences of job strain it is important to understand the factors that mediate such consequences. Although it has been acknowledged that coping may mediate the relationship between job strain and work-family conflict, the role of coping as a mediator has received little research attention. The current study is motivated by the lack of emphasis on the mediating role of coping in the South African context.

1.7 Structure of the study

CHAPTER ONE (INTRODUCTION): Chapter One contains an introduction to the topic, which includes a discussion of the background and rationale for the study.

CHAPTER TWO (LITERATURE REVIEW): Chapter Two provides an in depth analysis of the empirical literature surrounding the field of work-family conflict, job strain and coping. It also offers the various theoretical frameworks that can be used to understanding the relationship that exists between the above mentioned constructs. The research aims as well as the research objectives were also presented.

CHAPTER THREE (METHODOLOGY): This chapter includes the research method used in conducting the study. It involves a description of the participants used in the study, the sampling method, ethical considerations and the statistical procedures.

CHAPTER FOUR (RESULTS): This chapter includes the results of the statistical tests conducted on the data. A Principals Components Analysis conducted on the COPE scale (Carver, Scheier & Weintraub, 1989). Cronbach's alpha coefficients and descriptive statistics are

described. The results of Pearson product-moment correlation and regression analysis are reported.

CHAPTER FIVE (DISCUSSION): In Chapter Five the results of the statistical analysis are presented.

CHAPTER SIX (CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS): This chapter contains the conclusions that were drawn from the findings of the study. It also reflects on the limitations of the study and makes suggestions for future research conducted.

CHAPTER TWO: LITERATURE REVIEW

This chapter covers the theoretical frameworks and the empirical literature on job strain, work-family conflict and coping. The frameworks include the spillover model of work-family conflict (Leiter & Durup, 1996) and the transactional model of stress and coping (Lazarus and Folkman, 1984). There is a wealth of literature that explores each of the above mentioned constructs individually; however, there is a noticeable lack of research that examines the above-mentioned variables in one study or in a relationship with each other. While there is a South African study that examines the relationship between coping and job strain (Spangenberg & Orpen-Lyall, 2000) the focus is not on the education profession.

2.1 Theoretical frameworks

Various models that describe the stress and coping relationship have been posited in the current literature (Lazarus & Folkman, 1984). The following study adopts two theoretical approaches that assist in understanding the concepts of job strain, work-family conflict and coping. Lazarus and Folkman's transactional model of stress and coping (1984) has been used to understand the relationship between stress and coping. The model was selected for this study due to the interactional stance it adopts in understanding the relationship between stress and coping. The transactional model of stress and coping posits that, the experience of strain and ones reaction to it is contextually dependent. The South African teaching environment is characterized by its own set of unique challenges and each educator responds individually to these challenges. The transactional model focuses on the impact of various stressors on the individual and the response to these stressors. The next section attempts to describe the various theories that are used in understanding the relationship between stress and coping.

2.1.1 Theories of Stress and Coping

Both stress and coping has been globally accepted as one of the most widely studied relationships in psychology (DeLongis & Holtzman, 2005). Various approaches have been applied to the above-mentioned relationship in an attempt to get a greater understanding of how both stress and coping interact with each other. Some of these approaches include:

- The Response-based Approach

In keeping with the present study which views strain as a response to work-family conflict, Hans Selye (1956) posited the response based approach in understanding the notion of stress and coping. Selye maintained that stress/strain is a response to noxious stimuli or environmental stressors. Strain can be viewed as a non-specific response of the body to these stimuli. Selye termed this non-specific response strain. By defining strain as a response, Selye (1956) saw strain as a dependent variable. The response-based approach is argued to be reductionistic in nature by focusing solely on physiological reactions. Taking into consideration the current study aimed to understand both the psychological and physiological reaction to job stress as a result the response based model was not appropriate.

- The Stimulus-based Approach

The second model posited by Holmes and Rahe (1967) views stress/strain as a stimulus. The stimulus approach attempts to identify the factors related to the work domain that places the individual's physical and psychological health at risk and in turn contributes to negative organisational outcomes (Pienaar & Rothmann, 2003). According to Lyon (2002) the stimulus based model proposes that life events and daily obstacles are symbolic of stressors. These stressors trigger responses from individuals. However, the proponents of the stimulus based

model have been found to be problematic in nature as it assumes that there are universal stressful events that are experienced in the same manner by all individuals. A critical analysis of this proponent will reveal that it is fairly reductionistic in nature to assume that all individuals experience stress in the same way and employ the same coping mechanisms. The current study posits that people employ various coping mechanisms to suit their personal needs and attempts to determine what these mechanisms are. Hence the stimulus based approach is not suitable for this study.

- The Transactional Model of Stress and Coping

The study adopts the transactional model of stress and coping as posited by Lazarus and Folkman (1984). The model is used to explain the relationship between stress and coping. According to the transactional model of stress and coping, strain is a result of the relationship between the person and the environment that is appraised by the individual as exceeding his/her resources. This suggests that strain can be viewed as the outcome that exists when people confront situations that tax or exceed their ability to manage them. The transactional model views stress as a result of the relationship between the individual and the environment. The model offers support for critical factors that may mediate the person-environment relationship.

Carver and Connor-Smith (2010) highlight two processes that serve as critical mediators of stressful person/environment encounters. These factors include both cognitive appraisal and coping. Cognitive appraisal is the process in which a person evaluates the relevance of a certain stressful encounter to his/her well-being. Through this evaluation, the individual begins to develop a perception of the stressful interaction. Carver and Connor-Smith (2010) go on to add that there are two phases in the cognitive appraisal process namely, primary and secondary

appraisals. Primary appraisal consists of the individual evaluating the potential benefits and threat's that the situation might impose. They state that if threat is perceived the occurrence of the event is expected to have negative consequences. From the above-mentioned definition then it can be seen that threat may have two primary effects. These effects are entirely dependent on the individual. The first effect occurs when one views a threat as something that is harmful and the warrants immediate action. This view of threat may result in the individual engaging in adaptive actions to deal with the proposed threat. However, if one were to view threat as beyond the reach of the individual and exceeding ones resources then this may result in the individual engaging in maladaptive actions or in some cases no action at all. DeLongis and Holtzman (2005) state that secondary appraisal on the contrary refers to the process where the individual evaluates the available resources that they may possess in their arsenal. These resources are used to overcome, prevent or improve the existing encounter. Secondary appraisal allows the individual to explore the various options to deal with the stressor.

Lending support to the present study, Lazarus (1991) maintains that coping should be viewed as a mediator rather than a moderator because the coping process arises from the transaction between the individual and the environment. Somerfield and McCrae (2000) support this notion by adding that intra-psychoic processes are able to intervene between stimuli and responses and this in turn leads to an emphasis on conscious and observational adaptable efforts. Carver and Connor-Smith (2005) state that coping is the process by which the individuals attempt to manage internal and external demands that exceed their resources. Somerfield and McCrae (2000) go on to state that coping can be classified as the individual efforts one makes to manage distressing problems and emotions. These efforts are known to affect both the physical and psychological outcomes of strain and may alter these outcomes. In the development of the transactional model

for stress and coping, Lazarus and Folkman (1984) added that two major and widely recognized classifications of coping are congruent with the transactional model of stress and strain.

The first classification is what is termed problem-focused coping (Lazarus & Folkman, 1984). Problem-focused coping can be viewed as active in nature and involves attempts made by the individual to do something in order to alter the stressful situation (Van der Colff & Rothmann, 2009). The second classification termed emotion-focused coping can be viewed as being more palliative in nature and involves the regulation of stressful emotions. Folkman and Moskowitz (2004) argue that, although most strain inducing situations require the use of both dimensions of coping, problem-focused coping tends to dominate when people feel that there is something that can be done about the situation. Emotion-focused coping tends to dominate when people feel that the stressor is something that must be endured. However, although the distinction between both problem and emotion-focused coping is an important one, it has proven to be too simplistic in nature. Authors argue (Carver et al., 1989) that limiting coping in terms of distinct categories can prove fatal. Therefore, the present study aimed to describe the strategies that educators use to cope and in doing this will attempt to identify additional categories that do not fall within the ambit of problem and emotional-focused coping.

2.1.2 Models of work-family conflict

There has been an extensive amount of literature (Panitik et al., 2012; Wallis & Price, 2002; Yildirim & Aycan, 2008) that attempts to explain the occurrence of work-family conflict. However, due to the divergent views held, work-family conflict has become a contentious issue in the current literature (Casper et al., 2007; Hill, 2005). Work-family harmony theorists contend that the relationship that exists between work and family domains should not be labelled

‘conflict’, as discrepancies between these domains are inevitable in the lives of educators. Authors further argue that, coping mechanisms which include work-family facilitation, supervisor and spousal support and personal coping resources allows for the management of the so-called conflict (Hill, 2005). However, although work-family conflict theorists are criticized for the belief that work and family domains are bound to conflict with each other, work-family conflict continues to be a dominant phenomenon in the field of organizational studies (Hill, 2005; Karimi et al., 2012; Panitik et al., 2012). The models that are used to understand the occurrence of work-family conflict are discussed below.

- The Segmentation model

The segmentation model contains the idea that work and family domains are distinct categories which individuals are able to separate in terms of time, attitudes and feelings (Wallis & Price, 2003). This model is closely assimilated to the Resource Scarcity Hypothesis (RSH) (Shimazu, Bakker, & Demerouti, 2009). The RSH maintains that since an individual possesses limited resources, devoting attention to the work domain by means of dividing resources such as time, and energy results in neglecting the family domain. The task of managing multiple roles such as employee, parent and spouse becomes problematic as one draws on the same scarce resources time and time again (Van der Colff & Rothmann, 2009). The depletion of the individual’s resources may manifest itself through psychological and psychosomatic symptoms (Shimazu, et al., 2009). Critics argue that the segmentation model fails to acknowledge the bi-directional nature of the work-family relationship. By assuming that these domains are distinct the segmentation model fails to emphasise the permeability of both work and family roles. No attempt is made to acknowledge the interactional relationship between variables (Shimazu et al., 2009).

- The Compensation Model

The compensation model proposes that lack of fulfilment in one domain will lead to the search for satisfaction in another. The compensation model has contradictory implications within the South African context. Patel, Govender, Paruk and Ramgoon, (2006) comment on Casale and Posel (2005) stating that unlike other countries in which females are being drawn into the labour market because of the demand for female labour, in South Africa women are being forced into the workforce out of sheer economic need. The authors argue that financial needs tend to force the individual to renounce the traditional roles and reprioritize their values. This makes workers acutely aware of the need to keep interference resulting from family responsibilities at a minimum since for many South African females, a job means survival. Therefore, the act of assuming that workers are looking for fulfilment in their work has become an increasingly risky assumption to make. The compensation model fails to accommodate for the less economically developed countries such as South Africa.

- The Spillover Model

In an attempt to understand the phenomenon of work-family conflict among female educators, the spillover model as developed by Leiter and Durup (1996) is used. The model has previously been used by South African authors, Wallis and Price (2002) in an attempt to explore the prevalence of work-family conflict among single mothers. The spillover model of work-family conflict was selected for this study due to its emphasis on reciprocal permeability. By assuming that attitudes developed in the work role carries over into the family role and that family attitudes carry over into the work role, the spillover model explains the occurrence of work-family conflict for contemporary working woman in which both work and family roles take priority.

The spillover model (Leiter & Durup, 1996) is based on the carry-over of attitudes from one role to another (Patel et al., 2006). Leiter and Durup (1996) state that spillover is the process in which strain in one domain accumulates to such an extent that it is experienced in another domain. Shimazu et al. (2009) supports this notion and claims that spillover can be viewed as a within-person-across-domain transmission of demands and the consequent strain from one area of life to another.

The present study focused on both work-to-family conflict and family-to-work conflict. The study adopts the assumption that a negative experience in the work role is most likely to spill over into the family role. Likewise, a negative experience in the family role is most likely to be expressed in the work role. Literature surrounding the spillover effect (Bullock & Waugh, 2004) suggests that unpleasant moods are more likely to spillover from work-to-family and family-to-work domains, than positive moods. These unpleasant moods are expected to exacerbate the occurrence of work-family conflict (Bullock & Waugh, 2004). An examination of the spillover model in understanding work-family conflict reveals that the occurrence of spillover is most likely a result of an inability to balance work and family roles. Wallis and Price (2003) state that contrary to popular belief, spillover of moods may not necessarily be negative but is entirely dependent on individual differences such as, personal disposition, coping, immediate environment, gender, family structure and family role.

However, although interaction between roles can result in a positive outcome, most studies on work-family conflict (Panitik et al., 2012; Shimazu et al., 2009) report a negative outcome. While the spillover model has featured prominently in the field of work-family conflict, researchers have identified a structural flaw that calls for a reevaluation of the spillover model. Shimazu et al. (2009) argue that the Spillover model focuses on how experiences in the work

domain are transferred to and interferes with the family domain. The authors add that in addition to the examination of the effects of spillover on the individual, it will prove useful to examine the transmission of moods across individuals, whereby demands and consequent strain have effects on closely related persons. In the spillover model where the focus is on intrapersonal effects of work-family conflict there is little understanding of how work-family conflict influences one's family or other members of the organization (peers, supervisors). Understanding the effect of work-family conflict on one's family and on other members of the organization is theoretically relevant given that the level of work-family conflict one experiences can be influenced by others. For example, employee work-family conflict can influence relationships with supervisors, spouses and children. Thus, while it can be argued that spillover is the intra individual transmission of stress or strain, crossover is a dyadic inter individual transmission of stress or strain. The spillover-crossover (Bakker & Demerouti, 2013) model integrates both approaches and is referred to in the current study. The selection of this model was motivated by the bi-directional stance the study adopted. The current study attempted to examine both the effect of work-to-family conflict and family-to-work conflict. Taking this into consideration, it is important to understand the effects that spillover has not only on the individual but also on closely related individuals that are part of individuals work and family domains.

- *Bi-directional nature of work-family conflict*

Yildirim and Ayca (2008) describe the Asymmetric permeability boundary theory (Plecks, 1977) that is used to understand the bi-directional nature of work-family conflict. According to this theory, work and family roles are asymmetrically permeable. This implies that there is no distinction between the work and family domains and that moods experienced in one domain are automatically felt in another. Evidence suggests that both work-to-family conflict and family-to-

work conflict can have negative effects on important work and family related outcomes (Shimazu et al., 2009). The bi-directional approach to work-family conflict is relevant to this research study as it is important to demonstrate the extent to which teachers experience both work-to-family conflict and family-to-work conflict. This provides an opportunity to challenge the gender role stereotypes that maintain that females are more prone to family-to-work conflict than work-to-family conflict. A reason for considering both directions of work-family conflict is that the occurrence of role conflict among both domains is reported to vary. Work-family interference has been found to be more prevalent than family-work interference (Hill, 2005). It is therefore important to differentiate between work-family interference and family-work inference as this will allow for an in depth understanding into the various factors that give rise to such conflict (Amstad et al., 2011).

This section covered the most prominent models that are used in the field of work-family conflict and stress and coping. Of the models proposed, the spillover model (Leiter & Durup, 1996) has been selected to frame the argument proposed by the current study. Attempts were made to highlight the bi-directional nature of work-family conflict as well as illustrate why such a stance is important in the study of work-family conflict among females. In addition, the transactional model of stress and coping is used as a framework to show how stress and coping interacts and to explore which, if any coping strategies play a role in influencing outcomes relating to work-family conflict. In the present sample it is expected that the job strain experienced by the educators will correlate significantly with the levels of work-family conflict that they experience. However, it is argued that the coping skills employed by the sample have the potential to mediate the relationship between job strain and the levels of work-family conflict.

The following section discusses the empirical literature surrounding the field of work-family conflict, job strain and coping. Both international and South African studies are discussed in an attempt to emphasize the occurrence of work-family conflict.

2.2 Empirical studies

Studies generated around the area of work family conflict and job strain (Shimazu et al., 2010) have consistently shown a significant relationship between job strain and work-family conflict. In their investigations Engelbrecht et al. (2001) and Griffith et al. (1999) demonstrated strong relationships between increased work-to-family conflict and increased physical symptoms of somatic complaints such as poor appetite, fatigue as well as psychological symptoms such as depression and decrease of wellbeing. A substantial body of evidence generated from studies conducted on the job strain and work-family conflict relationship (Casper et al., 2007) suggests that tensions between work and family roles can lead to decrements in physical wellbeing and psychological functioning. Studies on job strain and work-family conflict outcomes are summarised in the next section.

2.2.1 Job strain

International studies

A study conducted by Travers and Cooper (1996) indicated that in the United States of America human service occupations such nursing and teaching are reported to be amongst the most stressful professions. Stress has been known to manifest itself through both psychological and physiological outcomes. Griffith et al. (1999) revealed that in a study conducted on female educators, those who reported high levels of job strain displayed physiological symptoms of elevated blood pressure and heart rate in the evening, long after the working day was complete.

Heightened levels of blood pressure suggested an inability to unwind after work and this is expected to manifest itself into more serious psychological outcomes. Lending support to the above mentioned point Borg (1990), in a review of studies on occupational stress among teachers in British schools, revealed irritation to be a primary reaction to strain and found it to be associated with feelings of restlessness, impatience and frustration. These feelings appeared to be a result of the individual being hindered from carrying out his/her work. In an examination of the effects of strain on female workers, Parikh, Taukari and Bhattacharya (2004) concluded that occupational strain is a result of conflicting internal and external pressures that alters the effectiveness of the individual in both work and family roles. Thus, not only has job-related strain been viewed as having a negative effect on one's performance in their work and family roles but also on one's emotional and physical functioning.

The authors reported that of the entire cohort of female workers examined in their study, the majority revealed that workload influenced their perceptions of health and well-being. To support the notion of workload and demands an American study conducted by Johnson, Kardos, Kauffman, Liu and Donaldson (2004), revealed that strain was a result of an imbalance between job demands and the individual's ability to adapt to these demands. This suggests that there is direct link between meeting the demands of one's work role and the level of strain one experiences. Johnson et al. (2004) went on to conclude that there is a need for the effective management of work demands if one is to reduce the strain experienced. The various findings in the field of job strain reveal that the experience of job-related strain is universal. However, although the experience may be universal both the extent and the prevalence of job strain are dependent on various contextual and individual factors. Closely related to the current research Borg's (1990) review revealed that the work-related strain experienced by individuals is entirely

dependent on the individual's skills and strategies as well as on organizational practices in the work settings. This suggests that although the literature warns of the detrimental effects of job strain (Borg, 1990; Griffith et al., 1999; Kyriacou, 2001), the presence of individual mechanisms such as coping strategies can help mediate the effects of strain.

South African studies

According to Jackson and Rothmann (2005) South Africans report a great deal of stress and strain in the work context on a daily basis. In addition, Pienaar and Rothmann (2003) reported that 84.2 % of educators in KwaZulu-Natal viewed teaching as an extremely stressful occupation. To substantiate the above finding, Jeena (1998) revealed that in a study of 217 educators, all respondents reported high levels of stress irrespective of age, gender and other demographic variables. In examining the effects of strain, Moodley (2001) revealed that high levels of strain are often accompanied by distinct, physiological, psychological and behavioral consequences. Results revealed that, psychological consequences appeared to dominate physiological and behavioral consequences. This suggests that there is a need for research that attempts to explore the psychological consequences of strain since these consequences seem to dominate in the South African environment. South African studies (Jackson & Rothmann, 2005; Pienaar & Rothmann, 2003) report that destructive outcomes, such as psychological distress, absenteeism, physical illness and poor work performance are caused by a combination of individual characteristics and characteristics of the work environment. This suggests that each individual experiences both stress and strain in different ways. This lends support to the current study which argues that coping strategies may alter the outcome of strain in different ways for each individual. Hence, since educators' experiences of strain may be a result of various factors

inherent in the teaching profession, it cannot be compared to strain experienced by other occupations.

Providing support to the international studies mentioned earlier, Van Tonder and Williams (2009) argued that, after undertaking a study to determine the levels of strain among female workers in South Africa, results revealed that one of the greatest contributing factors to the high levels of stress was workload. As mentioned, high workload is expected to give rise to conflict between the work and family roles. In a study to determine the level of strain among South African nurses, Van der Colff and Rothmann (2009) reported that respondents chose to divide the work related strain they experienced into two subsections. The subsection that is relevant to this study is the personal stressors subsection. Respondents stated that personal stressors comprised of the inability to manage home, work and sometimes study responsibilities. Schulze and Steyn (2007) report that in a study conducted on female educators, the home/work interface is a significant source of stress for both males and females although twice as many females than males report this as a stressor. Female employees went to state that their roles as educators, mothers, housekeepers etcetera caused much stress.

2.2.2 Work-family conflict

International studies

Much of the work-family conflict research has been conducted in the American context (Casper et al., 2007; Johnson et al., 2004; Lambert & Lambert, 2001). Research has indicated that, the concept of time constraints has been found to be a key determinant of work-family conflict (Olive & Venter, 2003). Throughout the day, the individual is confronted with tasks that must be accomplished within a given time frame. This results in time from one domain be it work or

family being dedicated to another domain. In a British study by Griffith et al. (1999) results revealed that the concept of work pressures, which included perceived lack of time, was the most prominent source of conflict and stress amongst female educators. Time pressures become problematic because not only does it lead to work-family conflict but it also results in the individual becoming overwhelmed with responsibilities in the various roles.

Studies conducted on role overload (Panitik et al., 2012; Sikora, Moore, Grunberg & Greenberg, 2012) indicate that one's role in either the work or family domain may become overly demanding and this is often a result of the individual having too much to do. Individuals who reported excessive responsibilities in one role were found to have elevated levels of work-family conflict (Griffith et al., 1999). This places strain on the individual's available resources as the one must keep up with the daily demands that they are confronted. The increase in role demands is expected to have negative consequences. Yildirim and Aycan (2008) found that role overload was a main determinant of spillover. Individuals are often unable to fulfil the needs of one role and often carry over these responsibilities into the other role. Yildirim and Aycan (2008) concluded that, role overload among working women is often a result of the daily tasks required in a specific role becoming unbearable.

Research conducted by Lambert and Lambert (2001) revealed that, a common result of role overload is role conflict. When an individual is overwhelmed by excess responsibility in one role, the individual begins to experience conflict. Investigating the bi-directional nature of work-family conflict will allow for one to examine if role conflict is more prevalent among work-to-family conflict or family-to-work conflict.

Research suggests that the experience of role conflict is often an indication of the decision-making authority an individual possesses (Warren & Johnson, 1995). Possessing decision-making authority suggests that the time allocated to one's work as well as scheduling of the work week is at the discretion of the individual. In an attempt to examine the effect of decision-making authority on work-family conflict among different occupations Panitik et al. (2012) and Yildirim and Ayca (2008) found that certain work schedules may make it difficult to co-ordinate work and family activities and this contributes to job-related strain and work-family conflict. Occupations that maintain strict work times may make it difficult for people to cater to their roles outside the work domain.

A common trend in the work-family conflict literature is the important role that social support plays in the experience of work-family conflict. In a study examining the role of factors that may mediate the conflict-strain relationship, Engelbrecht et al. (2001) found that professional support among female educators can substantially reduce the occurrence of job-related strain. In addition, such support had the ability to elevate educator's positive emotions. This allows them to effectively cope with work-family conflict. In an attempt to examine the role of organizational and spousal support in mediating the effects of work-family conflict Ayca and Eskin (2005) revealed that organisational support was related to low levels of work-to-family conflict whereas spousal support was related to low levels of family-to-work conflict. This indicates that any form of support may be effective in decreasing the level of work-family conflict experienced. These findings support the argument that certain coping mechanisms (as demonstrated with social support) are capable of influencing outcomes relating to work stress.

South African Studies

Lending support to international studies, South African studies revealed that the aspect time pressures also proved to be a common factor in exacerbating the degree of work-family conflict among South African employees. Oliver and Venter (2003) report that excessive time pressures among female educators were found to result in a neglect of personal priorities causing conflict among work and family roles. South African studies (Moodley, 2001; Oliver & Venter, 2003) report that role conflict has been identified as a primary characteristic of the teaching profession as majority of people reported being torn between conflicting demands from the multiple roles that they occupy. According to Reddy (2010) an examination of work-family conflict among low level female employees revealed that role conflict seemed to originate from the work place and factors inherent in the nature of the job.

Supporting the findings of international studies South African studies also report similar trends in work-family conflict regarding both autonomy and decision-making authority. Reddy (2010) revealed that respondents who reported high levels of autonomy had the ability to manage their job activities and reduce demand levels. Wallis and Price (2003) revealed that South African females expressed their wishes to tailor their working lives around the needs of their families by being given ample opportunity to structure their own work day. This is due to the fact that, such employees feel that free decision-making authority will give them the freedom to handle the demands of work without many restrictive schedules or demands. Following international trends, South African studies revealed that organizational and spousal support may be effective in mediating the negative effects of work-family conflict. Reddy (2010), revealed a negative relationship between work-family conflict and organizational support. This indicates the support may help alleviate the level of work-family conflict experienced.

An analysis of results from several South African studies revealed interesting findings. According to Wallis and Price (2003) salient work-related demands identified by studies in South Africa include number of hours worked, work schedule, and aspects of job duties such as workload and pressure. These factors were found to be the primary factors that were evident across all work-family conflict studies. Supporting the argument made regarding the detrimental effects of low levels self-efficacy Reddy (2010) concluded that, work-related self-efficacy had a negative correlation with work-family-conflict. This result suggests that low levels of work-related efficacy are related to high levels of work-family conflict.

2.2.3 Coping

International studies

Howard and Johnson (2004) assert that, research surrounding the benefits of coping suggests that there is evidence of a link between functional coping skills and survival skills in stressful jobs. In a study conducted on professionals in the human service field in Spain, Jenaro, Flores and Arias (2007) revealed that coping skills substantially increased occupational resilience. Gazieli (1993) argues that, a vast array of research supports the above mentioned finding as this is largely due to the fact that coping responses are known to affect the impact of stress on psychological and physical well-being as well as on psychological responses. Thus, by reducing the impact of strain on psychological wellbeing, coping allows one to appropriately confront conflict-ridden situations.

Research in the field of coping (Carver & Connor-Smith, 2010; Folkman & Moskowitz, 2004) has focused extensively on understanding the effectiveness of the two primary dimensions of coping. Studies (Folkman and Moskowitz, 2004; Gazieli, 1993, Griffith et al., 1999) have

revealed that, emotion-focused coping is the least effective coping technique as there is no focus on direct confrontation of the stressor. In a study on an American sample of teachers, Gaziel (1993) revealed that the most commonly used coping techniques with work related stress included talking to others, direct action, and preparatory actions, all falling under the ambit of problem solving coping. The various studies that report findings on the effectiveness of coping mechanisms tend to favour problem-solving methods of coping. However, a study by Folkman and Moskowitz (2004) revealed that there is no consistent effect of coping strategies. The authors went on to conclude that problem-focused forms of coping are sometimes associated with negative outcomes, sometimes with positive outcomes and sometimes neither. The authors concluded that, the outcome is entirely dependent on the characteristics of the appraisal of a stressful encounter. The varying findings regarding the most effective coping style suggests that the picture remains unclear. As a result, there can be no concrete conclusions regarding the effectiveness of coping styles and this suggests that there is a need for studies that attempt to explore the effectiveness of various styles of coping. In the context of the present study it is possible then that certain coping strategies (depending on whether they are adaptive or maladaptive) may mediate the relationship between job strain and work-family conflict in different ways. Coyne and Gottlieb (1996) argue that the range and complexity of coping behaviours cannot be captured by the distinction between problem focused and emotion-focused coping and that there is a need to examine a range of coping strategies.

Authors that support the role of coping as a mediator (Lundberg, Mardberg & Frankenhaeuser, 1994) suggest that appraisal of existing conflict between work and family roles will determine the effectiveness of the coping strategies employed. Results of an American study DeLongis and Holtzman (2005) also revealed that the stressor appears to play an important role in determining

the use and effectiveness of coping resources. This suggests that the environment surrounding a stressor is significant. However, although results have suggested that the appraisal of the situation will determine the coping measure used Parker and Endler (1992) warn that the occurrence of a coping response may mean that not all coping items may be relevant and that the use of one coping response may require the mutual support of another.

On the basis of his findings Dewe (2004) concluded that stress does not reside solely in the individual or in the environment but is relational in nature. In essence, the occurrence of stress involves some sort of transaction between the two. Stress may not be solely a result of work or home circumstances, but may be a result of the individual not possessing the appropriate coping skills to deal with these circumstances as both these factors interact with each other. Hence, it is necessary to understand the work context, barriers and support structures as well as ones sense of personal agency. This suggests that the study of coping cannot simply adopt a dispositional stance as previous studies have (Griffith et al., 1999) but that attention must be paid to both situational and dispositional factors. In his study, Dewe (2004) concluded that coping needs to be understood in terms of the nature of any stressful encounter and seen in terms of variability and flexibility rather than consistency and stability.

South African studies

In an attempt to understand the role that coping plays in the lives of South African workers, Spangenberg and Orpen-Iyall (2000) reported that each individual adopts certain coping skills to deal with work related dilemmas and that coping has become an ingrained part of everyday life. In an attempt to examine the relationship between strain and coping Van der Colff and Rothmann (2009) found that job strain and coping skills has proven to have a consistent negative

relationship. According to Pienaar and Rothmann (2003) the vast array of research conducted in the field of coping in South Africa all point to one conclusion, that is, the level of stress an individual experiences in his or her organisation and home context and the extent to which adverse effects such as psychological and other strains occur, depends on how he or she is able to cope with the strain inducing demands. Pienaar and Rothmann (2003) support this finding by providing results from their study in which they concluded that coping responses are known to impact the psychological and physiological responses of stress. The authors go on to add, that in a review of South African coping studies, overall trends indicate that poor coping skills appear to be a significant factor in determining the intensity of stress outcomes.

South African studies report results that suggest that emotion-focused coping can have negative consequences. Pienaar and Rothmann (2003) revealed that the failure to deal actively with stressful situations was associated with poor adjustment because the use of avoidant coping strategies meant that acceptance of the reality situation was delayed. Furthermore, Spangenberg and Orpen-Lyall (2000) revealed that palliative coping mechanisms proved destructive in nature, which exacerbated strain levels among respondents. According to Van der Colff and Rothmann (2009) withdrawal and avoidance strategies are associated with high levels of strain while low strain levels are associated with constructive or active coping strategies. In an attempt to investigate the coping strategies of educators in South Africa, Engelbrecht et al. (2001) revealed that the most useful strategy was making a plan of action and following it, followed closely by seeking help and resources from other educators. Supporting this, Mathonsi (2008) reported that seeking active social support proved to be the most frequently used coping strategy among South African nurses. These strategies fall strictly within the ambit of problem solving strategies. However, it must be noted that although studies point to the beneficial outcomes of using

problem-focused mechanisms, there are various problem-focused and emotion-focused mechanisms that may be maladaptive to the strain circumstance. The current study attempted to identify both adaptive and maladaptive coping mechanisms.

Pienaar and Rothmann (2003) argued that in the South African context, the measurement of coping has been overshadowed by interest in the influence of situational and personal differences on coping behaviours as well as the effectiveness of different coping mechanisms. Van der Colff and Rothmann (2009) further argue that, coping strategies need to be evaluated in the strain inducing contexts in which they occur. Due to the lack of clarity surrounding the use of coping strategies in the South Africa it is important that there are studies that adopt a multidimensional measure of coping as this will create more awareness into the wide range of coping mechanisms that South African educators employ.

2.3 Aims/research questions

There are two major aims of the research study. The first aim was to determine if a relationship existed between job strain and work-family conflict in the sample of female educators. The second aim was to explore the various coping strategies used by these educators as mediators in the above-mentioned relationship. By attempting to explore the levels of strain work-family conflict and as well as how educators cope, the research may provide the stimulus for further research which could lead to the development of appropriate intervention strategies. The following research questions have been proposed to assist the researcher in accomplishing the aims of the study:

Research questions

1. What are the levels of job strain and work family conflict in a sample of female educators in the ILembe District?
2. What are the coping strategies employed by female educators?
3. Is there a relationship between job strain and work-family conflict?
4. Do coping strategies mediate the relationship between job strain and work-family conflict?

2.4 Chapter summary: This chapter defined important concepts of the study which included the three main constructs of the study that is job strain, work-family conflict and coping as well as the relationships that exist between them. The chapter began with a comprehensive discussion of the primary theoretical frameworks that can be found in the field of job-related strain and work-family conflict. Additionally, motivations were provided for the selected theoretical frameworks that support the arguments made in this study. This included the transactional model of stress and coping and the spillover model of work-family conflict. A review of the South African and international empirical studies on the variables of interest was also presented.

CHAPTER THREE: METHODOLOGY

This chapter contains an explanation of the research method utilized in conducting the study. In addition, it includes a description of the research design, the participants, the sampling method used to select them and the research instruments used in the study. The ethical considerations of the study are also described. Additionally, the procedure followed in conducting the research as well as the statistical methods used to analyse the data are discussed.

3.1 Research design

The study was based on a quantitative research design. According to Neuman (2011) quantitative research consists of preparation prior to data collection and analysis and focuses on issues of measurement and sampling. A quantitative approach to research was selected because of the importance it places on scientific methods of data collection and analysis through the use of statistical methods. Falling under the ambit of the quantitative paradigm, the descriptive correlational/survey design was used to establish a relationship between the two variables. In this design, “descriptions are conducted by means of identifying the relationships between variables” (Mouton & Marias, 1990, p. 44). The study employed a cross-sectional design in which an attempt is made to analyse the relationship between variables at one specific point in time with a specified sample (Dixon & Sagas, 2007). In this design data is gathered from a relatively large number of cases within the time frame and the focus is not on the characteristics of individual cases but on the over-all statistics from which the abstractions and conclusions are drawn (Balnaves & Caputi, 2001).

3.2 Sampling methods

Sampling in social science research is a technique that is used to select a subset of units of analysis from the desired population (Balnaves & Caputi, 2001). The present study has made use of the non-probability sampling method. Non-probability sampling maintains that “the probability that each element in the sample will be included in the population cannot be guaranteed” (Huysamen, 2001, p. 37). Although this may pose a threat towards the generalisability of the study, the sampling method was suited to this study as the study sample was specific and unique to the teaching occupation. The non-probability sampling approach is known to be less complicated and more economical in comparison to probability sampling methods (Huysamen, 2001). The current study was specifically aimed at female educators in schools across the iLembe district and therefore the purposive sampling method was used to select the sample. Purposive sampling is a technique in which “the researcher uses experience to deliberately obtain participants in such a manner that the sample obtained may be regarded as representative of the relevant population” (Huysamen, 2001, p. 44).

3.3 Participants

The table that follows contains a summary of the sample characteristics

Table 1

Characteristics of the sample (N= 107)

Characteristic	Frequency	Percentage
<i>Type of school</i>		
Primary	70	65.4
Secondary	37	34.6
<i>Marital status</i>		
Single	31	29.0
Married	68	63.5
Divorced	3	2.80
Other	5	4.70
<i>Number of children</i>		
0 children	21	19.8
1-2 children	61	57.5
3-4 children	24	22.7
<i>Level of qualification</i>		
Certificate	21	19.6
Diploma	31	29.0
Degree	29	27.1
Postgrad	26	24.3
<i>Teacher grades (Position held at school)</i>		
Level one	89	84.0
Grade controller	1	0.90
Head of department	11	10.4
Deputy principal	4	3.80
Principal	1	0.90
<i>Hours of work per week</i>		
20-35 hours	38	36.5
36-45 hours	40	38.5
46-60 hours	23	22.1
61+ hours	3	2.90
<i>Years as an educator</i>		
Under 5-5years	23	21.5
6-15 years	24	22.4
16-25 years	25	23.4
26 years	35	32.7

It may be noted that because of missing data the frequencies for the following characteristics: number of children, teacher grades (position held at school) and hours worked per a week do not add up to N= 107. Participants that were selected for the study were drawn from government schools across the ILembe district functioning under the South African Department of Education. The schools that were selected included Stanger Secondary, ML Sultan Secondary, Stanger South Secondary, Stanger Manor Primary, Stanger Heights Primary, Glen-hills Primary and Melville Primary school. A sample of N=107 educators was used. Although both primary and secondary schools were targeted, there was a greater response from primary schools which totalled 64.8% (N=70) of the sample in comparison to the high schools which was 34.3% (N=37). The primary selection requirement for educators was gender. All females from all age groups were targeted. The ages of the respondents varied with the youngest respondent being 21 and the oldest respondent being 65 years old. Teachers occupying different positions in each school were used, this included principals, heads of departments, grade controllers and level one educators. Level one/standard educators formed the crux of the sample making up 82.4% (N=89) of the respondents, while only 1 respondent fell in the principal category.

3.4 Instruments

The study made use of self-report questionnaires to collect the required data. Each questionnaire was accompanied by a comprehensive letter of informed consent that explained the purpose of the study (refer to Appendix A). The consent forms also assured participants of anonymity and confidentiality. Each questionnaire comprised of four scales (Appendices B to E) which included:

Part one: Demographic details of the participants.

Part two: the Teacher Stress Measure (TSM) (Moodley, 2001).

Part three: the Work-Family conflict scale (WFC) (Netemeyer et al., 1996).

Part four: the Coping Orientation for Problems Experienced questionnaire (COPE) (Carver et al., 1989).

A description of each of the questionnaire components is presented below:

3.4.1 Demographic questionnaire: Respondents age, marital status, number of children, subjects taught, were among the demographic details requested.

3.4.2 Job strain

The Teacher Stress Measure is a 40-item questionnaire that was adapted by Moodley (2001) for use in a study which attempted to measure the levels of stress and strain among South African educators (Moodley, 2001). The Teacher Stress Measure consists of items that were drawn from three scales which included: The Occupational Stress Inventory (Osipow & Spokane, 1998), the Teacher Stress Measure (Bennet, 1989) and the Teaching Environment Inventory (Padayachee, 1992). Moodley (2001) states that the international measures on their own, do not address the relevant issues that South African educators face. In addition, Moodley attempted to identify a list of possible role-related stressors for South African educators and therefore required a comprehensive measure that tapped into various issues affecting educators. The range of stressors as listed below were extracted from The Occupational Stress Inventory, the Teacher Stress Measure and The Teaching Environment Inventory and were compiled to form the 40 item questionnaire used in this study. A pilot study using the 40-item Teacher Stress Measure was conducted by Moodley (2001) to determine if the items were appropriate for the teaching

profession. Results revealed a Cronbach's alpha of .86 for items on the Teacher Stress Measure in the South African sample. The measure is designed to identify role-related stressors among educators as well as the potential effect such stressors may have on the individual. The items cover a range of stressors including:

- Learner pressures
- Time and work load pressures
- Promotions
- Salary
- Interpersonal relationships
- Support and recognition
- Role ambiguity
- Role conflict
- Decision-making
- Role insufficiency
- Fiscal and austerity management

Items in the Teacher Stress Measure include, "I am given opportunities for joint decision making in my school" and "Constant interaction with others leaves me drained". Responses are scored using a five-point Likert-type response scale, ranging from 1- rarely true or never; 2= occasionally true; 3 = often true; 4=usually true; 5 = true most of the time. The scale is designed

to identify the area in which the individual experiences the highest degree of stress. Reverse scoring was used on the positively phrase items so that the higher the score the greater the level of stress experienced.

3.4.3 Work-family conflict

The 10-item work-family conflict scale was used to measure both the occurrence of work-to-family conflict and family-to-work conflict (Netemeyer et al., 1996). In terms of work-to-family conflict, the measure (5 items) assesses the amount of interference work puts on family life. With regards to family-to-work conflict, the measure (5 items) assesses the extent to which engagement in the family role prevents one from competently and comfortably fulfilling roles in the work environment. The measure has previously been used in a research setting involving teaching staff (Dixon & Sagas, 2007) and employed the time-based, strain-based and behaviour-based conceptions of work-family conflict as posited by Greenhaus and Beutel (1984). The level of internal consistency for the work-family conflict scale is reported to be .86 and a factor analysis revealed an average of .75 for factor loading across all ten items on the scale (Karatepe & Kilic, 2007). Netemeyer et al. (1996) reported alpha coefficient levels ranging from .83 to .89, with an average of .88 for work-to-family conflict, and .86 for family-to-work conflict across the samples. In addition, the work-family conflict scale has been used in the South African context in which Opie and Henn (2013) reported a reliability coefficient of .96. An example of an item measuring work-to-family conflict is “Pressure from my work prevents me from attending to my family needs”. An example of an item measuring family-to-work conflict is: “Family responsibilities prevent me from completing my tasks at work”. A seven-point Likert scale, with a response format ranging from ‘strongly disagree’ to ‘strongly agree’ was used where 1= strongly disagree, 2=moderately disagree, 3= slightly disagree, 4= neutral response, 5= slightly

agree, 6= moderately agree, 7= strongly agree. High scores on both scales indicate high levels of work-to-family conflict as well as family-to-work-conflict.

3.4.4 Coping

The Coping Orientation for Problem Experienced questionnaire or COPE was used to measure coping dispositions among educators (Carver et al., 1989). The COPE is a 53-item scale that indicates the different ways in which individuals cope in different circumstances. The scale was developed to measure the ways that people respond to stress imposed by their surrounding environments. Addressing the needs of the researcher, the COPE aims to measure coping dispositions. It is assumed that in order to determine if coping mediates the strain/conflict relation there needs to be a measure of coping dispositions rather than situational style. The COPE also attempts to provide a comprehensive assessment of coping styles in that, it places emphasis on self-regulation. In developing the COPE scale Carver et al. (1989) emphasized the role of coping as a mediator. However, authors have advised against using an overall score to determine the mediating effects of coping as the scale is most effective when looking at problem-focused coping, emotion-focused coping and other dimensions of coping in relation to each other. Various attempts have been made to examine the effectiveness of problem-focused coping and emotion-focused coping separately. In this case the various dimensions of coping can be looked at individually. For the purpose of this study, attempts were made to look at the effectiveness of problem-focused coping, emotional-focused coping and other subscales of coping in isolation to each other to examine the commonly used coping styles. In a confirmatory factor analysis study conducted by Hasking and Oei (2002) an analysis of the eigen-values and screeplot revealed a 14-factor solution. These 14-factors were estimated to account for 72.32% of total variance in the data. The COPE consists of 14 subscales which are as follows:

- Active coping: making direct attempts to deal with the stressor.
- Planning: taking various steps and preparing in advance on how to deal with the stressor
- Prioritization: avoiding focusing on other problems and directing all attention towards the stressor.
- Restraint: approaching the stressor with caution and avoiding any rash actions.
- Social support: seeking advice from others on how to deal with the stressor.
- Emotional support: seeking support from others for emotional strength and resilience to deal with the stressor.
- Reinterpretation: reappraising of the stressful situation to identify positive aspects of the stressful situation.
- Acceptance: accepting the stressor and learning to move on and live with it.
- Religion: referring to a higher spiritual force for strengthening of one's faith.
- Ventilation: focusing on releasing any feelings brought about by the stressor.
- Denial: denying the existence of the stressor or refusing to acknowledge the stressor.
- Disengagement: disengaging from daily activities or refusing to engage in activities one would normally do.
- Mental disengagement: mentally shutting off or giving up due to the stressor.
- Alcohol- drug disengagement: engaging in drugs and alcohol to help cope with the stressor.

The COPE scale has been used by numerous South African studies (Van der Wateren, 1997; Pienaar & Rothmann, 2003; Van der Colff & Rothmann, 2009) and has yielded both reliable and valid scores for various cultural groups. Carver et al. (1989) reported alpha coefficients for the COPE ranging from .45 to .95. Rothmann, Jorgensen, and Mariam (2011) report reliability coefficients of .88, .83, .87 and .84 for the problem-focused coping, avoidance, seeking social support and turning to religion subscales. In addition, the authors report low reliability values for suppression of competing activities, acceptance, ventilation of emotions and positive reinterpretation and growth which are .67, .60, .68 and .66 respectively. Items in the COPE follow along the lines of “I prefer to address troubling issues rather than allow it time to get solved on its own” and “I discuss my feelings with someone”. The COPE is scored on a four-point Likert scale ranging from 1= I usually don’t do this at all; 2= I usually do this a little bit; 3= I usually do this a medium amount; 4= I usually do this a lot. For this scale the higher the score the greater the level of agreement by the respondent that this is a strategy that they use.

3.5 Procedure

The Higher Degrees Committee of the School of Applied Human Sciences, UKZN granted ethical clearance for the study (Appendix H). Each school received a fax requesting permission for the researcher to enter the school premises and address the educators (A copy of the letter may be found in appendix F-G). Each fax was followed by a personal phone call by the researcher, to the principal of each school. Once the researcher received permission to enter the school premises each school was visited personally. The researcher addressed all female educators regarding the study and requested their participation. The study was explained to the educators who were made aware that their anonymity and confidentiality would be respected at all times and that the findings of the study would not pose a threat to the educators or their

schools in any way. Each educator was handed a questionnaire booklet and asked to complete the informed consent forms before filling out the questionnaire. They were allowed a period of three weeks to fill out the questionnaires, after which the researcher returned to the schools and collected all completed questionnaires.

3.6 Data analysis strategies

The Statistical Package for the Social Science (SPSS) 21 was used to analyse the data. Initially, a Principals Components Analysis was conducted to determine if the factors included in the COPE were appropriate for the current sample. According to Tabachnick and Fidel (2013) factor analysis is important when the researcher is interested in the underlying structure of a particular measure. However, they warn that this structure may vary depending on the sample that is used. For this reason the items of the COPE were subjected to factor analysis to see whether the original structure was the same for the sample of educators in the present study. Descriptive statistics (mean, standard deviation, skewness and kurtosis) were used to describe the main variable. “The goal of descriptive statistics is to describe the data obtained from the samples of observations” (Newton & Rudestam, 1991, p. 54). Cronbach’s alpha coefficient was calculated for each of the scales used in order to assess the internal reliability of the items. Given that the study followed a correlational design, the primary statistical tests used were correlations. According to Aron and Aron (2002) the primary aim of correlations is to determine if a relationship exists between two variables. Attempts were made to determine if there was a relationship between work-family conflict coping and job strain. Thereafter, attempts were made to determine if the mediator of interest, coping was related to both job-related strain and work-family conflict.

Baron and Kenny's (1986) regression approach as described by Holmbeck (1997) was used to assess the effects of coping as a mediator variable. Holmbeck (1997) states that in order for a variable to be classified a mediator there needs to be certain criteria present: The independent variable must have a significant relationship with the mediator, the independent variable must be associated with the dependent variable, the mediator must be associated with the dependent variable and lastly the impact of the independent variable on the dependent variable should be lower after controlling for the effects of a mediator.

3.7 Ethical concerns

Participants were made aware of the purpose of the study. This included a brief description of the area under study and the possible benefits of the research findings to the schools. They were informed of their rights as participants and how the data generated from the study would be utilized and stored. In addition, participants were made aware that their involvement in the research was purely on a voluntary basis and that should the need arise they could withdraw from the study at any time. All participants were also provided with the names and contact details of the researcher and the supervisor so that they could contact them if necessary. Due to the sensitive nature of the study's questions concerning conflicting feelings about adaptive and maladaptive coping skills and somatic symptoms of strain, the preservation of anonymity and confidentiality was of critical importance. Educators were asked to hand in all completed questionnaires in a sealed envelope to the researcher the moment the questionnaires are completed.

3.8 *Chapter summary*: The chapter provided information regarding the research methodology used in carrying out the study. The primary instruments used to collect the data were discussed. The chapter also included the procedure, data analysis strategies and ethical concerns of study.

CHAPTER FOUR RESULTS

This chapter contains the results from the statistical analysis of the data. It covers a range of descriptive and inferential statistics for the sample in this study. The statistical analysis included an attempt to identify any errors in the data set. Attempts were made to conduct frequency distributions for each of the categorical variables. Once the relevant errors were corrected, attempts were made to calculate composite scores for each of the scales. Thereafter, a Principal Component analysis was conducted to determine the underlying structure of the COPE for the teaching sample used in this study. Descriptive statistics as well as the Cronbach's alpha to test for the internal reliability of the scales were conducted. In addition, the Pearson product-moment coefficient was used to determine the relationships between the variables and linear regressions was used to test for mediation effects.

An independent samples *t* test was used to determine if there are any significant differences between educators from primary schools and educators from high schools with regards to the levels of strain experienced. Results indicated that there are no significant difference between the groups ($t = -1.683$; $p > 0.05$). As a result, they were treated as a homogenous group.

4.1 Exploratory Factor Analysis

The 53 items of the COPE scale was subjected to Principal Component Analysis. Sampling adequacy was assessed using the Keyser Olkin Meyer measure. According to Pallant (2010) a Keyser Olkin Meyer measure of above .60 is considered acceptable. The results of the factor analysis revealed a Keyser Olkin Meyer Measure of .72. In addition, the Bartlett's test of sphericity revealed a value of 3638.014 ($p < 0.001$). This suggests that the data was appropriate for structure detection (Pallant, 2010). The initial Principal Component Analysis revealed a total of 13 components with eigen values of above 1. The significance of the loadings used for interpretation were informed by Stevens' (1986) criteria, which involves using a more stringent alpha level found by multiplying the critical value by 2. For a sample of $n = 107$, the critical value ($p < 0.05$) is .1964. Therefore, the adjusted critical value is .3892. Using .39 as a critical value, all loadings equal to or greater than this value were retained. Inspection of the rotated component matrix revealed that component 12 and 13 did not contain any significant factor loadings. A second factor analysis was run with component 12 and 13 being omitted: 10 components were extracted in the second analysis. Component 10 had fewer than 3 significant items and was subsequently eliminated. The remaining 9 components contributed a total of 71.62 % of the total variance. This process resulted in 43 of the original 53 items emerging with significant loadings on the 9 components. The following themes were found to be common among the 9 components extracted by this study:

- Component 1 consisted of the *Disengagement and denial* subscales.
- Component 2 consisted of the *Active coping and planning* subscales.
- Component 3 consisted of the *Reinterpretation and acceptance* subscales.

- Component 4 consisted of the *Religion* subscale.
- Component 5 consisted of the *Social support* subscale.
- Component 6 consisted of the *Prioritisation* subscale.
- Component 7 consisted of the *Emotional Support* subscale.
- Component 8 consisted of the *Restraint coping* subscale.
- And lastly, component 9 consisted of the *Ventilation* subscale.

The COPE scale comprising of the 43 items and the 9 subscales mentioned above will hereafter be referred to as the New COPE and will be used in the statistical tests throughout the rest of this dissertation.

Table 2 contains a list of the factor loadings as well as the respective item numbers and subscales that comprise the New COPE.

Table 2*Factor Loadings for the New COPE Scale*

Items	Loadings
Factor 1: Disengagement and denial	
41. I refuse to believe that it happened	.72
42. I pretend that it hasn't really happened	.88
43. I act as though it never happened	.87
44. I say to myself this isn't real	.87
45. I give up the attempt to get what I want	.86
46. I give up trying to reach my goal	.79
47. I admit to myself that I can't deal with it and I quit trying	.70
Factor 2: Active coping and planning	
1. I take additional action to try and get rid of the problem	.69
2. I concentrate my efforts on doing something about it.	.77
3. I do what has to be done one step at a time	.70
4. I take direct action to get around the problem	.86
5. I try to come up with a strategy about what to do.	.79
6. I make a plan of action	.79
7. I think hard about what steps to take	.82
8. I think about how I might best handle the problem.	.63
Factor 3: Reinterpretation and acceptance	

25. I look for something good in what is happening	.64
26. I try to see it in a different light, to make it seem more positive	.63
29. I learn to live with it	.76
30. I accept that this has happened and that it can be changed	.90
31. I get used to the idea that it has happened	.89
32. I accept the reality of the fact that it has happened	.85
Factor 4: Religion	
33. I seek god's help	.91
34. I put my trust in god	.92
35. I try to find comfort in my religion	.90
36. I pray more than usual	.80
Factor 5: Social support	
17 I ask people who had similar experiences what to do	.49
18 I try to get advice from someone about what to do	.74
19 I talk to others to find out more about the situation	.88
20 I talk to someone who could do something about the problem	.84
Factor 6: Prioritisation	
9. I put aside other activities to concentrate on this	.63
10. I focus on dealing with this problem and if necessary let other things slide	.70
11. I keep myself from getting distracted by other thoughts or activities	.77

12. I try hard to prevent other things from interfering with my efforts to cope .65

Factor 7: Emotional support

22. I try to get emotional support from friends or relatives .85

23. I discuss my feelings with someone .72

24. I get sympathy and understanding from someone .82

Factor 8: Restraint

13 I force myself to wait for the right time to do something .71

14 I hold off doing anything about it till the situation permits .46

15. I make sure not to make matters worse by acting too soon .87

16. I restrain myself from doing anything too quickly .82

Factor 9: Ventilation

37. I get upset and let my emotions out .70

38 I let my feelings out .87

39 I feel a lot of emotional distress and I find myself expressing this a lot .77

The following section is a summary of the descriptive statistics yielded for each of the scales used in this study.

4.2 Descriptive statistics

Table 3 below provides a summary of the descriptive statistics for the sample under study. The, mean, standard deviation, skewness, kurtosis and reliability values for each of the three scales have been provided. As indicated by the results, the mean scores for the WFC, TSM and New

COPE were fairly average, suggesting that majority of the sample scored within the average range. The mean score for the work-to-family conflict subscale appears to be significantly higher than the mean score for the family-to-work conflict subscale. The mean scores of the New COPE subscales appear to be low to moderate. The means of the coping subscales cannot be compared with each other since each has a different number of items. However, there are a few points worth highlighting: of the subscales with four items which include *Prioritisation, Religion, Social support* and *Restraint, Religion* appeared to have the highest mean indicating that this subscale was the most frequently used among the sample. Of the subscales with between 6-8 items which included *Disengagement and denial, Reinterpretation and acceptance* and *Active coping and planning, Active coping and planning* seemed to be the most frequently used.

Negative skewness scores on the total work-family conflict scale, work-to-family conflict subscale, the family-to-work conflict subscale, New COPE scale and on majority of the New COPE subscales indicate that there appears to be a greater number of higher scores on these scales and subscales (Pallant, 2010). Positive skewness values on the Teacher Stress Measure and the *Ventilation* subscale indicates that there are a greater number of lower scores on these scales. Pallant (2010) asserts that kurtosis values that are smaller than 1 are considered acceptable. All scales apart from the work-to-family conflict subscale yielded kurtosis values smaller than 1. This suggests that the data is normally distributed. In addition, the Komolgorov-Smirnov Test of Normality revealed a significance value of $p > 0.05$. This indicates that the assumption of normality has not been violated.

The Cronbach's Alpha values for the total work-family conflict scale and subscales, the Teacher Stress Measure, New COPE and the New COPE subscales were computed. According to Pallant (2010) Cronbach's alpha values of above .70 are considered acceptable, although values that are

above .80 are generally preferable. All scales and subscales yielded alpha coefficients of above .80 apart from the *Prioritisation* and *Restraint* subscales which yielded values just below .80. This suggests that the all the scales and subscales possess adequate and satisfactory levels of internal reliability.

Table 3

Descriptive Statistics for the WFC, W-FC, F-WC, TSM, New COPE and New COPE Subscales (n=107)

Scale	HPS	M	SD	Skewness	Kurtosis	Cronbach's α
WFC	70	35.74	15.7	-0.048	-0.895	.93
W-FC	35	21.78	0.937	-0.465	-1.052	.95
F-WC	35	13.9	8.58	-0.681	-0.785	.93
TSM	200	117.01	19.51	0.033	0.792	.83
New COPE	172	118.39	17.31	-0.515	0.764	.90
Disengagement and denial	28	11.95	5.52	-1.065	0.334	.93
Active coping and planning	32	25.89	4.99	-0.74	0.303	.90
Reinterpretation and acceptance	24	18.9	4.7	-0.806	-0.265	.90
Religion	16	13.18	3.35	-1.122	0.337	.92
Social support	16	12.47	3.05	-0.788	0.474	.89
Prioritisation	16	10.2	2.96	-0.239	-0.275	.78
Emotional support	12	8.13	2.63	-0.417	-0.609	.87
Restraint	16	11.37	3.03	-0.352	-0.717	.79
Ventilation	12	6.57	2.73	0.402	-0.746	.88

Note. HPS= Highest Possible Score

M= Mean

SD= Standard deviation

WFC= Work Family Conflict scale

W-FC= Work-to-family conflict subscale

F-WC= Family-to-Work Conflict subscale

TSM= Teacher Stress Measure

New COPE= New Coping Orientation for Problem Experienced questionnaire

4.3 Correlations between variables

In accordance with the aims of this study the Pearson's r correlation was used to analyse the relationship between the total work-family conflict scale, work-to-family conflict subscale, family-to-work conflict subscale, job strain, coping and the various coping subscales. Results are presented in Table 4.

Table 4*Correlations Between WFC, W-FC, F-WC, TSM, New COPE and New COPE Subscales*

	1	2	3	4	5	6	7	8	9	10	11	12	13
1.WFC total													
2.W-FC	.88**												
3.F-WC	.86**	.52**											
4.TSM	.24*	.26*	.15										
5.New COPE	-.07	-.03	-.11	.10									
6.Disengagement and denial	.09	-.04	.20*	.31**	.48**								
7.Active coping and planning	-.11	-.06	-.12	-.08	.56**	.01							
8.Reinterpretation and acceptance	-.25**	-.22*	-.23*	-.05	.57**	.10	.13						
9.Religion	.03	.07	-.03	-.02	.45**	.08	.15	.29**					
10.Social support	-.06	.03	-.12	.19	.60**	-.03	.44**	.37**	.11				
11.Prioritisation	.05	-.01	.08	.24*	.51**	.37**	.30**	.17	.01	.16			
12.Emotional support	-.09	.03	-.19	.09	.57**	.13	.04	.34**	.19	.43**	.13		
13.Restraint	.06	-.05	-.07	.04	.50**	.18	.25*	.15	-.01	.39**	.32**	.28**	
14. Ventilation	.07	-.01	-.10	.12	.51**	.42**	.12	.09	.30**	.10	.29**	.36**	.15

Note. WFC= Work Family Conflict scale

W-FC= Work-to-family conflict subscale

F-WC= Family-to-work conflict subscale,

TSM= Teacher Stress Measure

New COPE= New Coping Orientation for Problem Experienced questionnaire

* = $p < 0.05$, ** = $p < 0.01$

The Pearson r values revealed that there is a positive relationship between job strain and the levels work-to-family conflict. This suggests that the higher the level of work-to-family conflict the higher the levels of job related strain. This offers partial support for the aim of the study which was to determine if there was a relationship between work-family conflict and job related strain. No relationship between job strain and family-to-work conflict was found. The following was found with regard to the coping subscales:

Both *Disengagement and denial* and *Prioritisation* had a significant positive relationship with job strain. This suggests that the higher the levels of *Disengagement and denial* and *Prioritisation* the higher the levels of job strain. *Disengagement and denial* was also found to have a positive relationship with family-to-work conflict. This indicates the higher levels of *Disengagement and denial* the higher the levels of family-to-work conflict. *Reinterpretation and acceptance* was found to have a negative relationship with the total work-family conflict scale, the work-to-family conflict subscale and the family to work conflict subscale. This suggests that the higher the levels of *Reinterpretation and acceptance* the lower the levels of work-to-family conflict and family-to-work conflict. An analysis of the inter correlation between the New COPE subscales revealed the following: *Disengagement and denial* was positively related to *Prioritisation* and *Ventilation*. *Active coping and planning* was positively related to *Social support*, *Prioritisation* and *Restraint*. *Reinterpretation and acceptance* was positively related to *Religion*, *Social support* and *Emotional support*. *Religion* was positively related to *Ventilation*. *Social support* was positively related to *Emotional support* and *Restraint*. *Prioritisation* and *Emotional support* were both positively related to *Restraint* and *Ventilation*.

4.4 Examining coping as a mediator in the work-family conflict and job strain relationship.

In accordance with the last aim of this study, attempts were made to explore the role that coping could play in mediating the job strain and work-family conflict relationship. Using Baron and Kenny's (1986) guidelines, the following four conditions were assessed:

1. The predictor (Job strain) must show a significant correlation with the hypothesized mediator (coping strategy).

As can be seen in Table 4, Job strain (TSM) was found to be significantly correlated with the strategies *Disengagement and denial* and with *Prioritisation*.

2. The predictor variable (Job strain) must be significantly correlated with the dependent measure. The analysis showed a significant correlation between Job strain and the work-to-family subscale.
3. The mediator (Coping strategies) must be significantly associated with the dependent variable (work-to-family conflict). Neither *Disengagement and denial* nor *Prioritisation* showed a correlation with the dependent variable.

Follow up regression analysis also revealed that these coping strategies were not significant predictors of the dependent variable. This means that the hypothesized variables do not have a mediating effect in the job strain and work-family conflict relationship in this sample of educators.

4.5 Chapter summary: Factor analysis conducted on the COPE items yielded 9 factors and these were treated as subscales in further analyses. Respondents showed moderate levels of job strain (although there appeared to be high variation in scores), high work-to-family conflict and appeared to favour certain coping strategies. There were significant correlations between job

strain and the work-to-family conflict, and job strain and two of the coping strategies. However these strategies did not correlate significantly with work-to-family conflict indicating that they did not play a mediating role in the job strain/work-to-family relationship.

CHAPTER FIVE: DISCUSSION

The South African teaching context is characterised by a number of stressful factors. Constant curriculum changes, high learner to educator ratio, time constraints and large amounts of paperwork, are some of the few challenges educators are faced with on a daily basis (Moodley, 2001). Research (Crouch, 2003; Griffith et al., 1999; Oliver & Venter, 2003) suggests that the stressful nature of the teaching profession is associated with the deterioration of the teaching workforce. In addition to dealing with the effects of job related strain, many female educators are confronted with balancing work stressors and family responsibilities. Studies (Cinamon & Rich, 2005, Yildirim & Ayca, 2008) report that such responsibilities are known to further exacerbate the experience of job related strain among females.

The aim of the current study was to determine if a relationship exists between job strain and the overall levels of work-family conflict in a sample of females taken from the teaching profession. The study aimed to explore the various coping strategies that these females employ in dealing with strain. To accomplish this, the study attempted to describe the levels of work-family conflict and job strain experienced by female educators as well as to determine the mediating role that coping strategies play in the above mentioned relationship.

5.1 Levels of Job strain

Job strain is defined as the experience of unpleasant, negative emotions, such as anger, anxiety and tension that give rise to both psychological and physiological effects (Kyriacou, 2001). The levels of job strain obtained in the current study appears to be moderate as reflected by a mean of 117.01 (SD = 19.51). Considering that the highest possible score was 200.00, a mean score of

117.01 indicates a moderate level of strain. However, the high standard deviation yielded by the current study (SD= 19.51) suggests that there is huge variability in the levels of strain reported by the sample of educators. This is a possible reason for the moderate mean score obtained. Unlike the study conducted by Moodley (2001) in which individual stressors were identified, the current study aimed to determine the overall levels of strain experienced by educators. Moodley (2001) revealed that salary, learner pressures and time and workload were the common stressors among educators.

In their study of educators using a different scale, Griffith et al. (1999) also report moderate levels of strain. In an attempt to determine the levels of stress among educators in South Africa, Milner and Khoza (2008) reported that the experience of occupational stress was low to moderate and this was similar in all schools included in their study. The literature on educator strain in South Africa suggests that due to the troubling issues surrounding the teaching context the levels of educator related strain are expected to be high. As mentioned, the large standard deviation could be a possible reason for the moderate level of strain obtained. Moodley (2001) offers a possible reason for the low/moderate levels of educator strain. The author argues that there are various factors found within the family domain that may help the individual to deal with the impact of stress and this could be a possible reason for the moderate levels of educator strain. These factors include social support and a non-restrictive atmosphere at home. These factors all contribute to low/moderate levels of strain. These reasons are consistent with the current study. An analysis of the coping strategies used by educators revealed that *Social support* is a strategy that is commonly used among educators. This suggests that educators receive support and assistance from the non-work related domain and this allows one to maintain

low/moderate levels of stress. Taking into consideration that the study was conducted in the school environment with most educators being aware of the proceedings, there is a possibility that educators were reluctant to reveal their challenges and problems due to fear of their responses being identified. According to Foxcroft and Roodt (2005) although anonymity may be assured many participants are still reluctant to reveal their responses. In addition to educators being hesitant to reveal their experiences of stress and their reactions to, the authors add that many respondents tend to exaggerate or minimise their responses to please those around them. The authors refer to this phenomenon as social desirability. Within the current study, the moderate levels of job strain could be a result of educators failing to report their true experiences due to social desirability.

5.2 Levels of Work-family conflict

Work-family conflict reflects the degree to which role responsibilities from the work and family domains are incompatible, that is, the extent to which participation in the work role is made more difficult by virtue of participation in the family role and vice versa (Netemeyer et al., 1996). Within the current study, the total level of work-family conflict obtained in the sample of educators as reflected by the total mean of 35.74 (SD= 15.7) appears to be in the moderate range. However, examination of the work-to-family conflict subscale indicates a high score, as reflected by the mean of 21.78 (SD = 9.37) on the work-to-family conflict subscale. In addition, a low score as indicated by the mean of 13.9 (SD= 8.53) on the family to work subscale was found. According to Netemeyer et al. (1996) work-to-family conflict refers to a form of interrole conflict in which the general demands of, the time devoted to, and strain created by the work role, interferes with performing family-related responsibilities. Family-to-work conflict describes

a form of interrole conflict in which the general demands of, time devoted to, and strain created by the family role interferes with performing work-related responsibilities. The mean scores of the work-to-family conflict subscale and family-to-work conflict subscale suggests that the level of work-to-family conflict is greater than the levels of family-to-work conflict in this sample. This suggests that the work role of female educators interferes with performing family related responsibilities more than the family role interferes with the performance of work related responsibilities.

The levels of work-to-family conflict obtained in the current study differs from the results of Opie and Henn (2013) who attempted to investigate the level of work-to-family conflict among working mothers in South Africa. Findings of their study reveal a mean of 12.94 (SD=5.40) for the work-to-family conflict scale subscale. This appears to differ substantially from the mean of the current study which is 21.67 (SD= 9.67). The high standard deviation yielded in the current study means that part of the sample could have scored extremely high while others scored very low on work-to -conflict. In any event it seems that the interference of work demands on family life is greater in the female educators of this sample compared to that of the women workers from various organisations used in the previously mentioned study.

In an attempt to study the levels of work-family conflict among Iranian teachers, Karimi et al. revealed a total work-family conflict mean of 32.95 (SD=12.5) which is similar to the total mean of 35.74 (SD=15.17) yielded in the current study. This suggests that general levels of work-family conflict experienced by educators in the Iranian sample and in the current sample are similar. However, an inspection of the individual subscales which are the work-to-family conflict

subscale and the family-to-work conflict subscale revealed a difference. The authors revealed a mean of 16.65 (SD= 6.04) for the work-to-family conflict subscale and a mean of 16.3 (SD= 6.11) for the family-to-work conflict subscale. The levels of work-to-family conflict and family-to-work conflict appear to be similar to each other in comparison to the levels of work-to family-conflict and family-to-work conflict yielded by this study. The current study yields higher levels of work-to-family conflict 21.78 (SD= 9.37) and lower levels of family-to-work conflict as reflected by a mean of 13.9 (SD=8.58).

Aycan and Eskin (2005) offer a possible reason for the discrepancy in the levels of work-to-family conflict within the Middle Eastern context and the South African context. According to the authors, the emphasis on traditional gender roles in Middle Eastern countries results in most females engaging in activities to prevent the work role from interfering with the family role. Although these traditional gender roles may be existent in the South African context the economic climate may indicate that South African females do not have a choice but to allow the work role to interfere with the family role. The South African context is characterised by a high degree of unemployment and it is possible that educators will go the extra mile to secure their jobs. This may mean allowing the work role to interfere with family responsibilities in the hope of securing ones job especially in the context of unemployment. Within the current sample 31 educators identify themselves as being mothers. This may suggest that they need to cater for their family needs and this elevates the need to retain employment. As a result, educators are willing to sacrifice their family needs at the expense of retaining employment.

Another possible reason for the high levels of work-to-family conflict in the current sample is the teaching environment that educators are faced with in South Africa. According to Frye and Breugh (2004) having control of one's work hours is related to low levels of work-to-family conflict. Kossek, Noe and DeMarr (1999) state that in most jobs, employees are able to restructure the work day in an *ad hoc* manner and this allows them to blend shifting roles. This allows one to minimise the effects of work to family interference. Cinamon and Rich (2005) assert that although educators have a shorter work day in comparison to other professions, the time spent at work is highly structured and leaves no room for attending to other responsibilities. In addition due to the increasing amount of paper work that educators are forced to attend to at home even the early work day is not enough to accomplish daily work demands.

As mentioned earlier, the current study yielded low levels of family-to-work conflict. According to Cinamon and Rich (2005) teaching experience is a significant predictor of the levels of family-to-work conflict experienced by an individual. The more instructional experience a teacher has, the more likely it is that she has gained the necessary professional expertise and adaptive behaviours that enable coping with family demands without unduly impinging upon perceived work responsibilities. Within the current sample 32.4 % of the educators indicated that they had more than 26 years of experience as educators. This probably played a role in that they had perhaps become more adept at handling their family responsibilities and not allowing these to interfere with the work role. Patel et al. (2006) report that in their attempt to examine the levels of family-to-work conflict in a sample of working mothers, approximately two thirds of the sample indicated the importance of paid work over housework, with about the same number

choosing to continue working if given the choice. However, in the present study the educators were not asked about their levels of work commitment or their preference for either role.

5.3 Coping strategies used

Coping can be defined as the mental and behavioural efforts that individuals used to manage situations evaluated as potentially harmful or stressful. As mentioned the current study aims to explore the various coping strategies that educators in the sample employ. Results of the Principal Components Analysis reveal a total of 9 factors of coping that are common to the current sample. These include: *Disengagement and denial*, *Active coping and planning*, *Reinterpretation and acceptance*, *Religion*, *Social support*, *Prioritisation*, *Emotional Support*, *Restraint* and *Ventilation*. This suggests that educators employ a wide range of coping strategies and do not adhere strictly to problem solving coping mechanisms as suggested by the literature (Folkman & Moskowitz, 2004). The 9 factor model extracted by this study differs from the initial 14-factor model presented by Carver et al. (1989). A review of previous literature reveals that most studies seem to utilize this 14-factor model proposed by Hasking and Oei, (2002). The findings of the present study are consistent with the results of South African studies (Van der Colff & Rothmann, 2009; Van der Wateren, 1997) in which Factor Analysis resulted in the exclusion of the *Alcohol-drug engagement* and the *Mental disengagement* subscales.

An examination of the various New COPE subscales reveals that the following scales are frequently used by the female educators in the current sample:

Active coping and planning which consists of making direct attempts to deal with the stressor and taking various steps and preparing in advance to deal with the stressor, *Reinterpretation and acceptance* which consists of reappraisal of the stressful situation to identify positive aspects as well as learning to move on and live with the stressor, *Religion* which consists of referring to a higher spiritual force for strengthening of one's faith and *Social support* which consists of seeking advice from others on how to deal with the stressor. The low standard deviations for these scales indicates that there is little variability among the subscales and this may pose a problem when attempting to determine the correlation of the subscale in relation to other variables (Aron & Aron, 2002).

Examination of the New COPE subscales revealed that the following strategies were less frequently used by the sample of female educators in this study: *Disengagement and denial* which consists of disengaging from daily activities as well as denying the existence of the stressor, *Prioritization* which consists of directing all ones attention towards the stressor. *Emotional support* which consists of seeking support from others for emotional strength and resilience to deal with the stressor, *Restraint* which consists of approaching the stressor with caution and avoiding any rash actions and *Ventilation* which consists of releasing any feelings brought about by the stressor.

An inspection of the various coping strategies used by the female educators in the sample indicates that in addition to strategies that fall under the ambit of the problem- focused coping dimension, strategies such as religion were also frequently used by the educators in the sample. In addition to coping strategies that fall under the ambit of emotion-focused coping, avoidance coping strategies were also less frequently used. Contradicting the findings of the current study,

Van der Colff and Rothmann (2009) and Pienaar and Rothmann (2003) reported that in their sample, participants tended to favour avoidant coping strategies which include *Behavioural disengagement and denial*. In addition, Griffith et al. (1999) reported that Behavioural disengagement and Prioritisation appeared to be amongst the most commonly used strategies in their British sample. These findings are inconsistent with the findings of the current study in which *Disengagement and denial* appeared to be less popular among educators. This supports the claim made earlier in the study which argues that the use of coping strategies are context dependent and that strategies favoured in one context may not be used in others.

5.4 Relationship between and job strain and work-family conflict

The study aimed to examine the relationship between job strain and work-family conflict in the sample of female educators. The results revealed a positive relationship between job strain and the work-to-family conflict subscale. This suggests that the higher the levels of work-to-family conflict the higher the levels of stress reported. The spillover model offers support for the above mentioned findings by stating that work-related duties and stressors begin to permeate the work family boundary and when these duties begin to spill over into the family role. Research by Panitik et al. (2012) indicated that the spillover of work is stressful not only to individual but to the family. The high levels of work-to-family conflict yielded by the current study is consistent with the findings of Oliver and Venter (2003) who revealed that almost a third of their teaching sample (33.1%) indicated that the job was a major source of conflict that added to the levels of strain they experienced. This corresponds with the findings of the current study in which those educators that reported higher levels of job strain reported higher levels of work-to-family conflict.

The correlational analysis revealed no relationship between the family-to-work conflict subscale and job strain. These findings are consistent with the findings of Panitik et al. (2012) who revealed that work-to-family conflict was highly correlated with stress and psychological strain when compared to family-to-work conflict. This result is in line with the previous literature (Frone, Russel & Cooper, 1992; Greenhaus & Beutell, 1984) which reports that work-to-family conflict appears to be highly associated to stress in comparison to family-to-work conflict. The argument made above is consistent with the findings of Cinamon and Rich (2005) who assert that family-to-work conflict appears to have a low correlation with job strain because in most cases family actually serves as a form of support which buffers the effects of strain.

Wallis and Price (2003) state that contrary to popular belief, spillover of moods which results in work-family conflict may not necessarily be negative but is entirely dependent on individual differences such as, personal disposition, coping, immediate environment, gender, family structure and family role. This suggests that although a relationship exists between job strain and work-to-family conflict there are mechanisms that may mediate the relationship between strain and conflict. Educators in this sample appear to employ a vast range of coping strategies to deal with the levels of strain experienced.

5.5 Mediating effect of coping

According to Carver et al. (1989) the COPE is designed to determine how people respond when they encounter difficult or stressful experiences in their lives. The COPE inventory is grounded in the belief that different events bring out somewhat different responses that are individually specific. Authors (Griffith et al., 1999; Lazarus & Folkman, 1989) argue that the effectiveness of

coping strategies is dependent on the individual. It has been argued that the effects of coping in mediating negative outcomes may be individual and context specific. In the development of the COPE questionnaire, Carver et al. (1989) warn against attempting to find a 'correct' coping strategy as different samples exhibit different patterns of relations. As a result the authors state that the use of total coping scores does not capture the range of strategies one may employ and should be avoided. Taking the above into consideration, the current study has analysed each New COPE subscale individually to determine the relationship between coping strategies, work-to-family conflict, family-to-work conflict and job strain in order to explore the mediating role each subscale may play in the job strain and work-family conflict relationship. Since *Disengagement and denial* and *Prioritisation* correlated positively with job strain but showed no correlation with work-to-family conflict these coping strategies could not be pursued further as a potential mediators.

Reinterpretation and acceptance showed a negative correlation with both work-family subscales but did not correlate with job strain, resulting in a rejection of its possible mediating capacity. While there may be a number of factors responsible for the failure to show a mediating effect of coping (including a limited sample size, problems with adequacy of the measures as well as the inclusion of too many measures), Holmbeck's (1997) explanation for some of the problems experienced in mediation analyses may well apply in this instance. He refers to the use of coping strategies as an example of a variable that is supposed to represent a response to another variable (marital conflict, for instance) in the model: one has to show that the variable (marital conflict) exists in the first place. In the context of this study, given the stressors linked to the teaching profession in South Africa as reflected in the literature, it was expected that high levels of job

strain would be reported. In addition he advises that a thorough rationale for the choice of the mediating variable needs to be provided. These issues will be commented on in the next chapter.

5.6 Chapter summary: The results that were presented in chapter four were discussed in the current chapter. Attempts were made to critically discuss the results that were presented and link them in an attempt to answer the research questions that were proposed: the moderate levels of job strain, high levels of work-to-family conflict, common coping strategies and the relationships among the variables. The results were also linked to previous research findings to identify discrepancies and similarities in the results.

CHAPTER SIX: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter discusses the conclusions arrived on based on the findings of the present study. The chapter also includes limitations and recommendations for future research in this area of study.

6.1. Conclusions

The following conclusions were drawn from the discussion in the previous chapter and are in accordance with the research objectives and questions.

The levels of job-related strain

The current study revealed this particular sample of educators in the iLembe region report moderate levels of job strain. Both international and South African studies suggest that due to the changing environment the levels of educators stress are expected to be exceedingly higher in comparison to past research. The findings of the current study are inconsistent with the findings of these studies as educators in the current sample reported moderate levels of strain.

The levels of work family conflict

Educators in the sample report high levels of work-to-family conflict and low levels of family-to-work conflict. Thus, it can be concluded that this sample of female educators in the iLembe district experience high levels of work-to-family conflict. This finding contradicts the existing literature that suggests that females are expected to report high levels of family-to-work conflict due to the importance they attribute to their family roles.

Coping strategies used by teachers

The current study revealed that educators employ a range of coping strategies. Strategies commonly employed by educators in the sample included, *Active coping and planning, Reinterpretation and acceptance, Religion* and *Social support*. Strategies that are less commonly used by educators in the sample include *Disengagement and denial, Prioritization, Emotional support, Restraint* and *Ventilation*. Research in the field of strain and coping suggests that problem-focused coping appears to be the most frequently used coping mechanism. The current study revealed that both problem focused strategies and religion were the most commonly used strategies. Thus it can be concluded that contradictory to the literature which suggests that problem-focused strategies will be the primary coping style the current study revealed that various coping strategies are used by educators in this sample.

The relationship between job strain and work-family conflict

Findings of the current study revealed that job strain was statistically and positive correlated with work-to-family conflict. This suggests that the higher the levels of work to family conflict the higher the levels of job strain. Thus, it can be concluded that as proposed job strain and work-to-family conflict share a relationship.

The mediating role of coping

In the present study there was no evidence to support the idea that coping strategies mediate the relationship between job strain and work-family conflict.

6.2 Limitations

One of the major limitations of the current study was the small sample size. The sample size as

well as the use of a non-probability sampling technique, limited the generalizability of the results. In addition to the extremely restrictive time frame within which the study was conducted, a major challenge that the researcher was faced with in the research process was the poor response rate. A total of 160 questionnaires were handed out and only 107 questionnaires were returned. Regardless of the many attempts made by the researcher to urge educators to participate, educators did not show much interest. This posed a challenge to the sample size and the quality of the responses. Another challenge related to the sample size was the discrepancy between high schools and primary schools. Majority of the sample comprised of primary school educators and this led to an over representation of primary schools. This over representation could have skewed the overall results. Possibly the most significant limitation of the study was the use of a cross sectional design which implies that no conclusion can be drawn about the causal order of variables (Van der Colff & Rothmann, 2009). This fits in with Holmbeck's (1997) caution regarding the presumption that the 'causal' attributes (in this case, job strain) actually exists. Failure to show high levels of job strain in the teaching profession may be a function of the limited sample size, the inadequacy of the measure or the phenomenon of social desirability. The scales of measurement that were used were all self-reports from educators. This is most likely to lead to the subjective interpretations of the educators interfering with response consistency and accuracy. The adequacy of the measure of job strain may be questioned seeing that it is still very much in the experimental phase, having been used in one other study. Perhaps a more focused measure needs to be considered for future research. Finally, a longitudinal design may have been more appropriate as it would have allowed one to predict the causal order of variables as well as determine the dispositional coping strategies employed by educators.

6.3 Recommendations:

Due to the small sample size the current study finds it difficult to make recommendations arising from the findings. More research into the levels of work-family conflict and coping strategies employed by South African educators is needed. Due to the supposed undemanding nature of the teaching profession, research has failed to explore strain inducing effects of teaching and the strategies employed to deal with these effects. Future research needs to adopt a larger sample size and explore the mediating role of a specific coping strategy in the relationship between job strain and work-family conflict. A possible reason for the inability of the current study to discover a mediating effect among other coping subscales could be the small sample size. It is also recommended that future researchers attempt to develop a valid and reliable measure the measures coping strategies and job strain in the South African context.

The current study has found that work-to-family conflict and job related strain is related. This suggests that the South African Department of Education together with the various schools need to implement programmes that attempt to alleviate levels of work-to-family conflict. As indicated it is important that principals and members of the Department of Education take initiatives to increase the levels of organisational and supervisor support, as these are the factors that are known to affect the experience of work-to-family conflict. It is also recommended that attempts are made to equip educators with the relevant skills that will allow them to cope effectively with work place stressors.

6.4 Chapter summary: Chapter six provided a summary of the research findings various limitations and recommendations. The chapter concluded with suggestions for future research and for organisations in dealing with work-family conflict and coping.

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APPENDICES

Appendix A: Letter of informed consent

Appendix B: Biographical questionnaire

Appendix C: Work-Family-Conflict scale

Appendix D: Teacher Stress Measure

Appendix E: COPE questionnaire

Appendix F: Letters to principals

Appendix G: Letter of permission granted from schools

Appendix H: Ethical clearance

Appendix A: Informed consent



29 July 2013

Dear Madam

My name is Daphne Pillay and I am a Masters of Social Science student in Industrial Psychology at the University of Kwa Zulu Natal. In order to fulfil the research requirements of the degree I plan to conduct a research study (dissertation) on work-to-family conflict and job strain. The aim of this study is to determine if there is a connection between work-to-family conflict and job strain. I am also interested in determining if employing the appropriate coping strategies will change the expected negative outcomes of the work family conflict and job strain relationship. I would like to determine which coping strategies you use the most.

You can help me by agreeing to participate in this study. Please note that your participation in this study will be much appreciated and that it is purely voluntary. If you choose not to participate there will be no negative consequences. Furthermore, if you do choose to participate, you may decline or withdraw from the study if you feel discomfort due to the questions asked. If you decide to partake in this study you will be given 2 weeks to complete four questionnaires at your own leisure. Results of all the questionnaires are confidential and your identity will be protected during the analysis of the data. This study is for the purpose of research and yields no financial gain for the participants. I assure you that the study will not compromise with your teaching time and you will be asked to complete the questionnaires and hand them in on the same afternoon during the 45 minutes you have agreed to. The research is scheduled to take place in the month of June.

The researcher for this current study holds both a Bachelor of Social Science degree in Industrial and General Psychology as well as an Honours degree in industrial Psychology from the University of Kwa-Zulu Natal and is in the process of attaining a Master's degree in Industrial Psychology. For reference, the research supervisor may be contacted. Her name is Mrs Cynthia. J. Patel and she can be reached on email at patelc@ukzn.ac.za or telephone on (031) 2607619. Alternatively the researcher can be contacted on 083 856 6241 or emailed at daphnepillay89@gmail.com

If you wish to obtain information on your rights as a participant, please contact Ms Phumelele

Ximba, Research Office, UKZN, on 031 360 3587.

DECLARATION:

I (full name of participant) hereby verify that I have complete understanding of the content of this document as well as the nature of the research project. I am aware that participation is on a voluntary basis, and hereby consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I desire.

SIGNATURE OF PARTICIPANT

DATE

.....

.....

RESEARCHER:

SUPERVISOR:

MISS DAPHNE PILLAY
(B.SocSc: General/Industrial Psychology)
BSocSc : Industrial Psychology Hons
CURRENT: MSocSc Industrial psychology
[daphnepillay89@gmail.com/](mailto:daphnepillay89@gmail.com)
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MRS CYNTHIA .J. PATEL
(Regd. Research Psychologist
patelc@ukzn.ac.za/ 031 2607619

Appendix B: Biographical Questionnaire

Please complete the following questionnaire by providing the required information.

1. Age:

2. Marital status: Single/Married/Divorced/Other

3. Number of children:

4. Level of qualification: in-service work, certificate/diploma/bachelor's degree/postgraduate qualification

5. Teacher grades (position in school): Standard educator, grade controller, head of department, deputy principal, and principal.

6. On average, how many hours do you work during the week (incl. work taken home)?

7. How long have you been employed at this institution?

8. How long have you been employed as educator?

Thank you for answering all the questions

Appendix C: Work-family conflict scale

<u>EXAMPLE</u>	STRONGLY DISAGREE	MODERATELY DISAGREE	SLIGHTLY DISAGREE	NEUTRAL RESPONSE	SLIGHTLY AGREE	MODERATELY AGREE	STRONGLY AGREE
<p>In the following table there are five statements about work-to-family conflict feelings. Please read each statement carefully and decide if you have ever experienced or felt what the statement describes. Indicate your level of consensus with the statement by writing ticking the appropriate block.</p>							
1. My work “robs” me of family time						✓	

	STRONGLY DISAGREE	MODERATELY DISAGREE	SLIGHTLY DISAGREE	NEUTRAL RESPONSE	SLIGHTLY AGREE	MODERATELY AGREE	STRONGLY AGREE
1. The demands of my work interfere with my home and family life.							
2. The amount of time my job takes up makes it difficult to fulfil family responsibilities.							
3. Things I want to do at home do not get done because of the demands my job puts on me.							
4. My job produces strain that makes it difficult to fulfil family duties.							
5. Due to work-related duties, I have to make changes to my plans for family activities							

6. The demands of my family or spouse/partner interfere with work-related activities.							
7. I have to put off doing things at work because of demands on my time at home.							
8. Things I want to do at work don't get done because of the demands of my family or spouse/partner.							
9. My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime.							
10. Family-related strain interferes with my ability to perform job-related duties.							

*Adapted from R. G. Netemeyer, R. Mcmurrian and J.S. Boles, All Right Reserved, 1996.

Appendix D: Teacher Stress Measure

<u>EXAMPLE</u>					
	RARELY TRUE OR NEVER	OCCASIONALLY TRUE	OFTEN TRUE	USUALLY TRUE	TRUE MOST OF THE TIME
1. I am able to manage with my duties as an educator					✓

	RARELY TRUE OR NEVER	OCCASIONALLY TRUE	OFTEN TRUE	USUALLY TRUE	TRUE MOST OF THE TIME
1. I am able to cope with the present teacher-pupil ratio					
2. I find teaching pupils with a wide range of abilities satisfying.					
3. Trying to complete reports and paperwork on time causes me a lot of stress.					
4. I am satisfied with the number of non-teaching periods allowed per week					
5. I am satisfied with the manner in which the current system of promotions is being handled.					
6. I find that my salary in relation to the work I do is insufficient.					

7. I find that dealing with student discipline problems puts a lot of stress on me.					
8. Motivating pupils to perform well is easy for me.					
9. Constant responsibility for others is a matter that I find hard to handle.					
10. I enjoy a good relationship with my pupils.					
11. My interaction with my colleagues is good.					
12. My relationship with my superiors is satisfying.					
13. I receive the right kind of support and recognition for my efforts.					
14. I find that on account of my workload I have insufficient time for teaching.					
15. Constant interaction with others leaves me drained.					
16. I am unclear what the scope and responsibilities of my job are.					
17. I receive enough information to carry out my job effectively.					
18. I often find that I am forced to do things that I don't agree with.					
19. Complying with provincial, national policies and school rules is very stressful.					
20. There is a lot of stress just keeping up with changing professional standards.					
21. I am given ample opportunities for joint decision making in my school.					
22. Having to participate in school activities outside of the normal working hours is very stressful for me.					
23. When I have conflicts with parents or students I am given the support I need.					
24. Knowing what I know now, if I had to decide all over again whether to take this job, I would definitely do so.					
25. If I were given the opportunity to retire early, I would gladly jump at it.					
26. I find that I am overwhelmed by the number of meetings I have to attend.					
27. I don't mind being redeployed to any school in the district.					

28. My workload interferes with my family life.					
29. I feel that I am not adequately prepared for my job.					
30. I approve of the quality of supervision being conducted at my school.					
31. I feel that as a teacher I am being held in high regard by the community.					
32. I experience great difficulties& in communicating with my colleagues.					
33. I feel that Outcomes Based Education is the best thing that could have happened to education.					
34. The degree of violence at my school frightens me.					
35. I have influence over what goes on in my school.					
36. I find that the staff meetings at my school are very beneficial.					
37. Victimization at my school has affected me deeply.					
38. I find that duties are arbitrarily imposed on me.					
39. I am given ample opportunities to grow in my school.					
40. I find the atmosphere in my school stifling.					

*Adapted from S. H. Osipow & A. R. Spokane, 1998; H. F. Bennet, 1989 and P. G. Padayachee, 1992. All rights reserved

Appendix E: COPE

<u>EXAMPLE</u>	I USUALLY DON'T DO THIS AT ALL	I USUALLY DO THIS A LITTLE BIT	I USUALLY DO THIS A MEDIUM AMOUNT	I USUALLY DO THIS ALOT
<p>There are 53 statements of coping in stressful situations. Please read each statement carefully and by examining the scale below, establish your degree of severity for each item.</p>				
1. I prefer to address troubling issues rather than allow it time to get solved on its on	✓			
	I USUALLY DON'T DO THIS AT ALL	I USUALLY DO THIS A LITTLE BIT	I USUALLY DO THIS A MEDIUM AMOUNT	I USUALLY DO THIS ALOT
1 I take additional action to try to get rid of the problem				
2. I concentrate my efforts on doing Something about it.				
3. I do what has to be done, one step at a time.				
4. I take direct action to get around the problem.				
5. I try to come up with a strategy about what to do.				
6. I make a plan of action.				

7. I think hard about what steps to take.				
8. I think about how I might best handle the Problem				
9. I put aside other activities in order to concentrate on this.				
10. I focus on dealing with this problem, and if necessary let other things slide a little.				
11. I keep myself from getting distracted by other thoughts or activities.				
12. I try hard to prevent other things from interfering with my efforts at dealing with this.				
13. I force myself to wait for the right time to do something.				
14. I hold off doing anything about it until the situation permits.				
15. I make sure not to make matters worse by acting too soon.				
16. I restrain myself from doing anything too quickly.				
17. I ask people who have had similar experiences what they did.				
18. I try to get advice from someone about what to do.				
19. I talk to someone to find out more about the situation.				
20. I talk to someone who could do something concrete about the problem.				
21. I talk to someone about how I feel.				
22. I try to get emotional support from friends or relatives.				
23. I discuss my feelings with someone.				
24. I get sympathy and understanding from someone.				

25. I look for something good in what is happening.				
26. I try to see it in a different light, to make it seem more positive.				
27. I learn something from the experience.				
28. I try to grow as a person as a result of the experience.				
29. I learn to live with it.				
30. I accept that this has happened and that it can't be changed.				
31. I get used to the idea that it happened.				
32. I accept the reality of the fact that it happened.				
33. I seek God's help.				
34. I put my trust in God.				
35. I try to find comfort in my religion.				
36. I pray more than usual.				
37. I get upset and let my emotions out.				
38. I let my feelings out.				
39. I feel a lot of emotional distress and I find myself expressing those feelings a lot.				
40. I get upset, and am really aware of it.				
41. I refuse to believe that it has happened.				
42. I pretend that it hasn't really happened.				

43. I act as though it hasn't even happened.				
44. I say to myself "this isn't real."				
45. I give up the attempt to get what I want.				
46. I just give up trying to reach my goal.				
47. I admit to myself that I can't deal with it, and quit trying.				
48. I reduce the amount of effort I'm putting into solving the problem.				
49. I turn to work or other substitute activities to take my mind off things.				
50. I go to movies or watch TV, to think about it less.				
51. I daydream about things other than this.				
52. I sleep more than usual.				
53. I drink alcohol or take drugs, in order to think about the problem less.				

*Adapted from C.S Carver; M. F Scheier and J. K Weintraub, 1989. All rights reserved

Appendix F: Letter to principals



The Principal

Dear Sir/madam

PERMISSION TO CONDUCT RESEARCH STUDY

My name is Daphne Pillay and I am a Masters of Social Science student in Industrial Psychology at the University of Kwa Zulu Natal. In order to fulfil the research requirements of the degree I plan to conduct a research study (dissertation) on work-to-family conflict and job strain. The aim of this study is to determine if there is a connection between work-to-family and job strain. I am also interested in determining if the possession of coping skills by educators can alter the outcome of the work to family conflict and job strain relationship. I would like to determine the most appropriate coping strategies used by educators. This information can be used to develop interventions that may help change the outcome of work family conflict and job related strain.

You can help me by asking your female educators to participate in this study. I assure you that the study will not compromise teaching time and teachers will be given a week to complete the questionnaires at their own leisure and hand them to the secretary. I will make the necessary arrangements to pick the questionnaires up from the secretary. Participation in the study may yield great benefits for your school as you may receive exposure in recognised journals in the field of psychology and education should this research study be published. Furthermore to increase the response rate and serve as an incentive a cash reward of R500 will be given to the school with the highest response rate for the educators to treat themselves. The research is scheduled to take place as soon as the educators agree. Permission is being obtained from the Department of Education to conduct the study. Please feel free to contact me if your school might be interested.

Yours faithfully:

RESEARCHER:

MISS DAPHNE PILLAY

(B.SocS: Industrial Psychology Honours

[daphnepillay89@gmail.com/](mailto:daphnepillay89@gmail.com)

083 856 6241/032 551 5788)

SUPERVISOR:

MRS CYNTHIA .J. PATEL

(Regd. Research psychologist

patelc@ukzn.ac.za/ 031 260 7619

Appendix G: Letter from schools

19 September 2013



To whom it may concern

RE: PERMISSION GRANTED TO DAPHNE PILLAY TO CONDUCT RESEARCH.

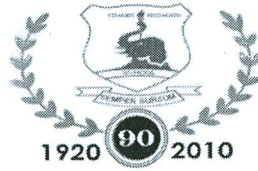
Daphne Pillay has been granted permission to conduct research at _____ for the purpose of obtaining her Master's Degree in Industrial Psychology.

Yours In Education

Principal

STANGER SECONDARY SCHOOL

Cnr. Elizabeth & Grammar Streets
P.O.Box 68
Stanger
4450



Tel/Fax : 032-5511227

To whom it may concern

16 August 2013

Dear Sir/Madam,

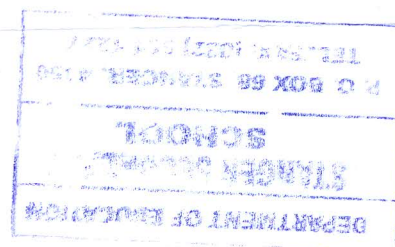
RE: SURVEY FOR MASTER DEGREE - INDUSTRIAL PSYCHOLOGY

Please be informed that the female members of staff agreed to participate in the research.

Thank you.

Yours faithfully


ACTING DEPUTY PRINCIPAL
MRS P NASAREE



STANGER SOUTH SECONDARY SCHOOL



P.O. BOX 4687
STANGER 4450
TEL/FAX: 032 552 5390
email:stangersouth@gmail.com

1 RUSSELL STREET
STANGER
4450

16 AUGUST 2013

TO WHOM IT MAY CONCERN

RE: PERMISSION GRANTED TO CONDUCT RESEARCH (DAPHNE PILLAY)

Daphne Pillay has been **granted permission** to conduct her research at Stanger South Secondary - for her Master's degree in Industrial Psychology.

We wish the very best in her research

Tanking you

KwaZulu Natal-Department of Education
STANGER SOUTH SEC. SCHOOL

2013 -08- 1 0

P.O. BOX 4687, STANGER 4450
TEL.:(032) 552 5390


PRINCIPAL

STANGER SOUTH SECONDARY IS COMMITTED TO HIV/AIDS AWARENESS



19 September 2013

To whom it may concern

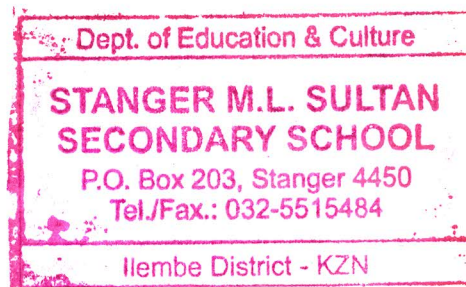
RE: PERMISSION GRANTED TO DAPHNE PILLAY TO CONDUCT RESEARCH.

Daphne Pillay has been granted permission to conduct research at ML Sultan Secondary High School for the purpose of obtaining her Master's Degree in Industrial Psychology.

Yours In Education

A handwritten signature in black ink, appearing to read "Daphne", written over a horizontal line.

Principal





19 September 2013

To whom it may concern

RE: PERMISSION GRANTED TO DAPHNE PILLAY TO CONDUCT RESEARCH.

Daphne Pillay has been granted permission to conduct research at Stanger Heights Primary for the purpose of obtaining her Master's Degree in Industrial Psychology.

Yours In Education



Principal

**STANGER HEIGHTS
PRIMARY SCHOOL**
P. O. BOX 1888
STANGER 4450
TELEFAX: 032 551 4305



19 September 2013

To whom it may concern

RE: PERMISSION GRANTED TO DAPHNE PILLAY TO CONDUCT RESEARCH.

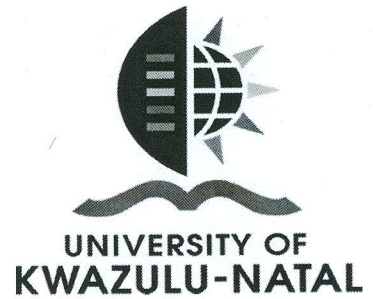
Daphne Pillay has been granted permission to conduct research at Stanger Manor Primary for the purpose of obtaining her Master's Degree in Industrial Psychology.

Yours In Education

A handwritten signature in cursive script, appearing to read "Rudy", written over a horizontal line.

Principal





19 September 2013

To whom it may concern

RE: PERMISSION GRANTED TO DAPHNE PILLAY TO CONDUCT RESEARCH.

Daphne Pillay has been granted permission to conduct research at Gledhow Primary School for the purpose of obtaining her Master's Degree in Industrial Psychology.

Yours In Education

A handwritten signature in black ink, appearing to be "D. Pillay", written over a horizontal line.

Principal





19 September 2013

To whom it may concern

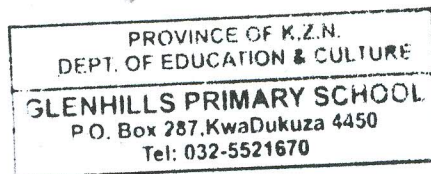
RE: PERMISSION GRANTED TO DAPHNE PILLAY TO CONDUCT RESEARCH.

Daphne Pillay has been granted permission to conduct research at Glenhills Primary School for the purpose of obtaining her Master's Degree in Industrial Psychology.

Yours In Education

A handwritten signature in black ink, appearing to read "Ekstasany", written over a horizontal line.

Principal



21 October 2013

Ms Daphne Pillay (209513698)
School of Applied Human Sciences
Howard College Campus

Protocol reference number: HSS/0634/013M

Project title: The mediating role of coping in the work family conflict / job strain relationship: A study of female educators in high schools across the ILembe region

Dear Ms Pillay,

Expedited Approval

I wish to inform you that your application has been granted Full Approval.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Dr Shenuka Singh (Acting Chair)

/ms

cc Supervisor: Ms Cynthia Patel
cc Academic Leader Research: Professor D McCracken
cc School Administrator: Ms Ausie Luthuli

Humanities & Social Sciences Research Ethics Committee

Dr Shenuka Singh (Acting Chair)

Westville Campus, Govan Mbeki Building

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Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohung@ukzn.ac.za

Website: www.ukzn.ac.za



1910 - 2010
100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville