PERSONALITY, COPING AND SENSE OF COHERENCE OF THE WORKING MOTHER

by

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submitted in part fulfilment of the requirements

for the degree of

MAGISTER OF ARTS

in the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

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JUNE 2006

I declare that "Personality, coping and sense of coherence of the working mother" is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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ALETTA WILHELMINA HERBST   DATE

ACKNOWLEDGEMENTS

I would like to express my sincerest thanks and gratitude to the following people:

- Dr Sanet Coetzee for her constant patience, guidance and support.
- SHL South Africa for making the OPQ available to use in this research project.
- Tina Joubert for doing all the statistical calculations.
- All the respondents that participated in this study - thank you for your willingness and time.

I would like to dedicate this master's dissertation to my father and mother, Gerhard and Clara Herbst. Thank you for all your love and support!

SUMMARY

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Working mothers face various challenges today, one of which is to be a mother, wife, caretaker and employee all at the same time. Fulfilling these challenging and sometimes demanding roles can contribute to role overload and conflict, which can have a negative impact on organisational effectiveness, as well as the overall well-being of the working mother. This dissertation outlines the relationship between personality dimensions, sense of coherence and the coping styles of working mothers from a salutogenic perspective.

The Occupational Personality Questionnaire (OPQ), Orientations to Life Questionnaire (OLQ) and the Coping Orientations to the Problems Experienced (COPE) Questionnaire were used to measure the relationship between personality dimensions, sense of coherence and the coping styles of working mothers. The study was conducted with 102 working mothers representing different ethnic groups and occupational levels in different occupational fields and organisations.

A theoretical relationship was established. The empirical investigation provided evidence of such a relationship and it seems that coping styles can be predicted from considering personality dimensions and sense of coherence.

KEY TERMS: Personality, personality dimensions, coping, coping styles, sense of coherence, working mother, salutogenic perspective, Occupational Personality Questionnaire (OPQ), Orientations to Life Questionnaire (OLQ), Coping Orientations to the Problems Experienced (COPE) Questionnaire

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CHAPTER 1

INTRODUCTION TO THE RESEARCH

This dissertation outlines the relationship between personality dimensions, sense of coherence and the coping styles of working mothers from a salutogenic perspective.

The first chapter provides a background to and a motivation for the research, followed by the problem statement. The general objectives of the research are stated, as well as the specific theoretical and empirical objectives. The paradigm perspective of the research will be discussed, which will demarcate the boundaries of the research, followed by a discussion of the research design and method, indicating the procedure for implementation. The first chapter concludes with an outline of the following chapters of this dissertation.

1.1   BACKGROUND AND MOTIVATION

Throughout history, women shared the work of providing food and clothing, and child-rearing with their spouses. With the coming of the Industrial Revolution, a need for labour outside the home arose, and women entered the factory system. During the wars, women made great progress and moved into more skilled and higher-paying jobs. As the servicemen returned, women – both white and black – reverted to their lower-status, unskilled positions (Koziara, Moskow & Tanner, 1987).

The traditional role of women in society was thus that of wife and mother, with the associated child care and domestic responsibilities ascribed to her (Biernat & Wortman, 1991). It is only in recent history that women have made up a sizeable segment of the work force and have made inroads into previously all-male occupations (Senior, 2003). Nowadays, more women are required to contribute to the income of the household and therefore pursue a career (Acker, 1992; Brannen & Moss, 1991; Shaw & Burns, 1993; Spade, 1994). This leads to families to being characterised by dual-career couples (Klerman & Leibowitz, 1994; Schwartz, 1989).

Research indicates that in dual-career couple's women still perform most of the domestic chores and that working mothers still remain responsible for child care and domestic responsibilities (Douglas & Michaels, 2004; Maconachie, 1990; Ozer, 1995). A major difficulty for careerwomen is the perceived incompatibility of their role as wife and mother with the role of worker (Shipley & Coats, 1992; Vosloo, 2000).

O'Leary (1977) terms this inter-role conflict as conflict that occurs due to the incompatibility of the demands associated with two or more roles. Role overload is also most likely to occur when mothers decide to pursue a career. Another set of roles (and demands associated with these roles) is added without the demands of the roles, which already exist, being reduced.

The accumulation and handling of the various roles usually contributes to increased levels of stress and difficulty for working mothers (Chusmir & Durand, 1987; Sears & Galambos, 1993; Vosloo, 2000). Although women are aware that more demands are made on them since they are expected to be present in the world in a greater variety of ways (as wife, mother and career woman), the question can be asked why certain working mothers function better in their multiple roles than others.

This question needs to be answered if one is to consider that the effectiveness with which the abovementioned problem is handled will most definitely have an influence on a woman's ability to perform effectively at work. Ineffectiveness, on the other hand, could lead to psychological, physiological and behavioural disorders, which can in turn lead to absenteeism, increased turnover, decreased efficiency, low job commitment and reduced company loyalty (Chusmir & Durand, 1987).

One way of distinguishing between different behavioural responses of women is to investigate different personality dimension/traits. Trait theories see personality as a combination of traits – consistent attributes that characterise a person (stable aspects of personality) (Saville & Holdsworth, 1999a). It is believed that all people essentially have the same traits and that they only differ in terms of the extent to which each trait is present in their personality (Sternberg, 1994). These theories thus stress the difference between individuals in terms of traits (Saville & Holdsworth, 1999a).

Trait theories provide a rationale for an individual's different responses to stress in their environments; promote an understanding of sources that prove to be stressful for people; and more importantly assist in identifying potential strategies for coping more effectively (Saville & Holdsworth, 1999a).

It seems that Personality Trait Theory, especially the occupational personality questionnaire model of personality (Saville & Holdsworth, 1999a), can contribute to a better understanding of how working mothers differ in their behavioural responses to their environments.

Knowledge and understanding of personality dimensions or traits can aid working mothers in expanding their choices and the amount of control they have, by helping them to realise their preferred or typical way of behaving, thinking and feeling. The stage can be set for working mothers to gain more command over their preferred or typical ways of behaving.

Personality can therefore be seen as an important mediating variable, determining the degree of stress likely to be experienced by a given individual in a given situation (Saville & Holdsworth, 1999a). Carver, Scheier and Pozo (1992) are of the opinion that, in terms of the self-regulatory model, stress is a particular class of experience and coping is the response that follows from these experiences.

Stress arises when the goal structures that an individual holds have the potential for conflict, especially when an individual is committed to two or more goals that can't be easily attained at the same time. Thus, devoting efforts to attaining one goal can impede the attainment of another goal. This role-conflict contributes to stress being experienced by the individual (Carver & Scheier, 1999).

Stress thus occurs when people encounter impediments to attaining desired and meaningful goals or when they try to avoid anti-goals. Coping is an effort to create conditions that permit one to continue moving towards a desired goal (or away from anti-goals), or an effort to disengage oneself from goals that are no longer seen as attainable (Carver & Scheier, 1999).

From the discussion above, it seems that personality and coping can act as determinants of the way individuals experience and handle stress. Previous research found relatively modest links between coping dispositions and more traditional personality variables. Carver, Scheier and Weintraub (1989) found that active coping, planning, positive reinterpretation and growth were positively associated with optimism the feeling of being generally able to do something about stressful situations, self-esteem and hardiness. Denial and behavioural disengagement were negatively correlated with optimism.

McCrae and Costa (1986) indicate that dimensions of personality are associated with certain preferred modes of coping. Their study indicates that neuroticism is associated with the use of hostile reaction, escapist fantasy, self-blame, sedation, withdrawal, wishful thinking, passivity and indecisiveness. Eysenck (1983) negatively associates neuroticism with task-orientated coping efforts (problem-focused coping). McCrae and Costa (1986) also found that extraversion correlated with rational action, positive thinking, substitution and restraint. South African studies on the topic under discussion are limited. This contributes to the motivation of this research and the contribution it can make to the field of industrial and organisational psychology.

Storm and Rothman (2003), however, report that emotional stability, extraversion, openness to experience and conscientiousness are associated with constructive coping styles, such as active problem-solving, seeking social support (instrumental reasons), positively reinterpreting stressful situations and acceptance of stressors. Agreeableness and conscientiousness are associated with an acceptance of stressors and turning to religion. On the other hand, passive coping styles, such as a focus on venting emotions, denial and seeking social support (emotional reasons) are associated with neuroticism, low agreeableness and low conscientiousness.

Recently a new paradigm emerged that describes optimal coping in the context of everyday living as moving away from the negative, abnormal or unhealthy state towards a positive, optimal condition of psychological fitness. This paradigm is called the salutogenic paradigm (*salu* meaning health; and *genic* meaning origin). In the salutogenic paradigm, daily encounters are viewed as potentially manageable, which

could in turn generate positive outcomes and eventually result in optimal coping or functioning (Strümpfer, 1990).

A central concept to the salutogenic paradigm is a sense of coherence, which is also a principal indicator in the movement of individuals along the health continuum. Antonovsky (1979) describes sense of coherence as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can be reasonably expected.

Individuals with a salutogenic orientation will thus search for meaning and resolution and not seek to escape the burden of stressors (Antonovsky, 1993). The salutogenic paradigm can thus be used to gain a better understanding of the role-conflict that the working mother is experiencing and the part that personality dimensions, sense of coherence and coping styles play in this conflict. This is confirmed by research done by Carrim (2000), which concludes that there is a significant correlation between the strength of working women's salutogenic construct scores and their ability to cope with multiple roles.

It is clear that it takes some skill from a working mother to be a successful spouse and mother, but more to be a productive worker, considering the fact that the working mother is confronted with different ways of being and must decide which way of being-in-the-world she will respond to and to what intensity (Richardson, 1991; Vosloo, 2000). This is especially important for today's organisations, which are constantly under pressure to make the best use of their human capital (Senior, 2003).

1.2   PROBLEM STATEMENT

Statistics South Africa (2004) indicates that 1.7 million women entered the labour market between 1991 and 2001, which shows that there was a 23,6% increase in women entering the labour market during that period. This confirms that an increasing number of women are entering the workforce annually, and that the unique challenges women are faced with today in terms of their various roles can no longer be ignored.

Working mothers do not function in isolation, but within a bigger system that includes the organisation and her work. The working mother also functions in an individual system that comprises her family and demographic variables (Vosloo, 2000). In terms of the interaction between these two systems and the conflict that may arise from this interaction, mechanisms need to be found for handling these roles effectively.

The effectiveness with which the working mother handles the perceived role-conflict will eventually affect her work performance, as well as the performance of the organisation of which she forms part.

Focus thus has to be placed on the implications of this for women's wellbeing and productivity, considering the fact that it is recognised that women contribute tremendously to the effectiveness and competitiveness of the organisation. Most organisations nowadays seem to realise the increased importance of utilising, developing and retaining female talent (Senior, 2003).

This is confirmed by research done by Welbourne (1999), which indicates that having women on top management teams, results in higher earnings, greater shareholder wealth and better long-term performance. Ruderman, Ohlott, Panzer and King's (2002) research confirms this by suggesting that the multiple roles women play in their personal lives provide practice for multi-skilling, opportunities to develop interpersonal skills and leadership practice that in the end enhance women's effectiveness in their working role.

The results of this study could be used for personnel selection, placement and assessment purposes, training (e.g. stress management), performance appraisals, career development, succession planning, as well as organisational development and interventions, which could all contribute to the overall effectiveness of female employees in the organisation, as well as general organisational effectiveness.

In terms of this study and the discussion above, the following will be examined:

- How does the literature describe personality dimensions?
- How does the literature describe sense of coherence and coping styles?
- What is the relationship between personality dimensions, as measured by the Occupational Personality Questionnaire (OPQ); sense of coherence, as measured by the Orientation to Life Questionnaire (OLQ); and coping styles, as measured by the Coping Orientations to the Problems Experienced (COPE) Questionnaire from a theoretical and emperical perspective?
- Can personality dimensions and sense of coherence act as predictors for specific coping styles?
- What recommendations can be made with regard to future research, the organisation and industrial and organisational psychology practices?

1.3   OBJECTIVES OF THE RESEARCH

From the above research questions, the following objectives are formulated:

1.3.1   General objectives

The general objective of this research is to examine the relationship between personality dimensions (as measured by the OPQ), sense of coherence (as measured by the OLQ) and coping styles (as measured by the COPE Questionnaire) in a sample of working mothers and to determine if personality dimensions and sense of coherence can predict specific and effective coping styles.

1.3.2   Specific objectives

In terms of the literature survey, the specific objectives are:

- To explore, clarify and define personality dimensions.
- To explore, clarify and define sense of coherence and coping styles.
- To postulate a theoretical relationship between personality dimensions (as measured by the OPQ), sense of coherence (as measured by the OLQ) and coping styles (as measured by the COPE Questionnaire).

In terms of the empirical study, the specific objectives are:

- To determine the relationship between personality dimensions (as measured by the OPQ), sense of coherence (as measured by the OLQ) and coping styles (as measured by the COPE Questionnaire) in a sample of working mothers.

- To determine if personality dimensions and sense of coherence can be used as predictors for specific coping styles in working mothers.

- To make recommendations regarding the findings with regard to future research, the organisation and industrial and organisational psychology practices.

1.4   PARADIGM PERSPECTIVE

For the purpose of this research, the term *paradigm* is used in its meta-theoretical or philosophical sense to indicate an implicit or explicit view of reality (Morgan, 1980). The paradigm perspective refers to the intellectual climate or variety of meta-theoretical values or beliefs and assumptions underlying the theories and models that form the definite context of this research (Mouton & Marais, 1992).

1.4.1   Relevant paradigms

The literature survey on personality dimensions, sense of coherence and coping styles will be presented from the salutogenic paradigm. More specifically, the literature survey on personality dimensions will focus on the occupational personality questionnaire model of personality (Saville & Holdsworth, 1999a). The literature survey on coping styles will be presented from the theory of Carver and Scheier (1999).

Basic assumptions of the salutogenic paradigm are the following:

- Studying the location of each person: questions are asked about the whole continuum, which implies that the whole population becomes the subject of study, rather than small samples of people who show particular forms of diseases (Strümpfer, 1995, p81).

- Studying the "deviant case": those that make it against all odds posed by human existence (Antonovsky, 1984a, p117).
- Tension does not necessarily imply stress. Some people tend to do even better in tense circumstances and turn the existence of stress into an advantage (Antonovsky, 1984a, p116).

Antonovsky (1979) is of the opinion that sense of coherence is a central concept to the salutogenic model. He defines it as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can be reasonably expected.

Basic assumptions of the OPQ model of personality (Saville & Holdsworth, 1999a) are that personality is concerned with three main areas or domains:

- *The relating domain*, indicating how an individual relates to others, characterised by traits such as assertiveness, outgoingness and empathy.
- *The thinking domain*, indicating how an individual typically thinks, including traits such as conservatism, abstract thinking and detail consciousness.
- *The feeling domain*, focusing on an individual's emotions, including traits such as anxiety, tough-mindedness and optimism.

A fourth domain can be added: *the energies (dynamism) domain*, which impinges on the other three domains and includes traits like vigour, competitiveness and decisiveness.

The basic assumptions of Carver and Scheier's theory of coping (Carver & Scheier, 1999) are the following:

- Some human goals are highly valued by individuals and are subjectively important to the people who hold them. Other goals are less important and even insignificant.
- Behaviour that is linked to these goals has a common structure and these structures are well captured in the self-regulation behavioural model.

- From the self-regulatory model, stress is seen as a particular class of experience and coping as the response that follows these experiences. Stress occurs when an individual encounters obstacles in attaining goals or avoiding anti-goals. Coping thus results in efforts to create conditions that permit an individual to continue moving towards desired goals or efforts to disengage from goals that are seen as being not that important any more.

The empirical study will be presented from the functionalistic paradigm. The following are the basic assumptions of this paradigm (Morgan, 1980):

- The functionalist perspective is primarily regulative and pragmatic in its basic orientations.
- It is concerned with understanding society in a way that generates useful empirical knowledge.
- Society has a concrete, real existence and a systematic character orientated to produce an ordered and regulated state of affairs.
- It encourages an approach to social theory that focuses on understanding the role of human beings in society.
- Behaviour is always seen as being contextually bound in a real world of concrete and tangible relationships.

Thematically, the empirical study will be on the relationship between the variables of personality dimensions, sense of coherence and coping styles.

1.4.2   Meta-theoretical statements

In a disciplinary context, this research focuses on psychology and industrial psychology as fields of application. The literature review focuses on personality dimensions, sense of coherence and coping styles. In terms of the empirical study, the focus is on psychometrics and statistical analysis.

1.4.2.1 Industrial psychology

Industrial psychology refers to a branch of applied psychology. In essence, it is concerned with work in organisations and includes such areas as tests and measurements, the study of organisations and organisational behaviour, personnel practices, human factors, the effects of work, efficiency, consumer surveys and market research (Plug, Meyer, Louw & Gouws, 1988). With reference to this research, personality dimensions, sense of coherence and coping styles influencing human and organisational behaviour will be studied.

1.4.3   Theoretical models

The literature survey on personality dimensions, sense of coherence and coping styles will be presented from the salutogenic paradigm. More specifically, the literature survey on personality dimensions will be presented from the OPQ model of personality (Saville & Holdsworth, 1999a), and the literature survey on coping styles from the theory of Carver and Scheier (1999).

1.4.4   Conceptual descriptions

The conceptual descriptions that are of relevance to this study are defined as follows:

1.4.4.1 Personality

According to Saville and Holdsworth (1999a), personality refers to a person's typical or preferred way of behaving, thinking and feeling. This definition is quite broad and refers to relatively stable and enduring characteristics that play a role in the way individuals relate to people, deal with tasks and respond to situations in general. It also recognises the fact that behaviour is to some extent determined by the current environment and circumstances.

1.4.4.2 Personality dimensions

Saville and Holdsworth (1999a: p8) define personality dimensions as any characteristic way of behaving, thinking, feeling or operating.

1.4.4.3 Sense of coherence

Sense of coherence can be defined as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected (Antovovsky, 1979).

1.4.4.4 Coping

Coping can be defined as an effort to create conditions that permit an individual to continue moving towards desired goals (or away from anti-goals), or an effort to disengage from goals that are no longer seen as attainable. Coping can thus be seen as a response that follows a stressful experience (Carver & Scheier, 1999, p562).

1.4.4.5 Coping styles

Coping can be defined in terms of problem-focused, emotion-focused or avoidance coping. *Problem-focused coping* consists of active attempts to remove an obstacle or to minimise its impact. *Emotion-focused coping* consists of attempts to reduce emotions of distress caused by obstacles, which can entail either reappraising the obstacle or managing the emotion. *Avoidance coping* cuts the problem-emotion distinction. It entails responses that appear to be aimed either at avoiding any acknowledgement that the problem exists or at giving up the attempt to do anything about the problem (Carver & Scheier, 1999, p569).

1.4.5 Central hypothesis

The central hypothesis of this research can be formulated as follows:

There is a relationship between personality dimensions, sense of coherence and the coping styles of working mothers; and personality dimensions and sense of coherence can be used as predictors of specific and effective coping styles.

1.5 RESEARCH DESIGN

According to Mouton and Marais (1992), the aim of a research design is to plan and structure a given research project in such a manner that the eventual external and internal validity of the research findings is maximised.

A research design involves the planning of the project and makes provision for building in the necessary controls so that there is confidence in the conclusions (Graziano & Raulin, 2000).

Research methodology is what makes social sciences scientific (Neuman, 1997). A science can be defined as a building of knowledge obtained by using a particular scientific methodology (Bless & Higson-Smith, 1995). The methodology that is used is very important, because of the link between the methodology and the research findings.

Research methods can be classified as being either quantitative or qualitative. This study can be classified as quantitative research. A quantitative research study collects some type of numerical data to answer the given research question (Christensen, 2001).

Internal validity refers to the extent to which it can be assumed that the independent variable produced the observed effect (Christensen, 2001). Internal validity will be ensured through the use of a scientific model and theory. The method of measurement will be chosen in a responsible and representative manner and will be presented in a standardised way.

The external validity will be ensured by selecting the sample to be representative of the total population. The findings will therefore have greater validity than merely for the project for which they were generated (Mouton & Marais, 1992).

The literature review and the empirical study can be categorised as descriptive (Mouton & Marais, 1992), as a research hypothesis will be formulated regarding the probable relationship between the variables of personality dimensions (independent variable), sense of coherence (independent variable) and coping styles (dependent variable). This will allow for the empirical testing of the relationship between the variables.

The cross-sectional survey design lends itself to the examination of stable, long-term states or conditions and allows the researcher to make inferences from a sample to a population. The integration of personality dimensions, sense of coherence and coping styles will be incorporated into the conclusion. Recommendations regarding the presented problem will be contextualised.

The unit of study is the individual, specifically the working mother.

1.6   RESEARCH METHOD

The research will be conducted in two phases: a literature review and an empirical investigation.

1.6.1   Phase one: Literature review

The literature review comprises three steps:

Step 1:   Personality dimensions will be explored, clarified and defined.

Step 2:   Sense of coherence and coping styles will be explored, clarified and defined.

Step 3:   The theoretical relationship between personality dimensions, sense of coherence and coping styles will be proposed.

1.6.2   Phase two: Empirical investigation

The empirical investigation comprises nine steps:

Step 1:   Description of the population and the sample

The sample will consist of approximately 120 randomly selected working mothers, representing different ethnic groups and occupying different occupational levels in different occupational fields and organisations. A prerequisite will be that the individual must be married, pursuing a career and at the same time be responsible for fulfilling the traditional family responsibilities of mother and wife. Their children will be school going, thus under 18 years of age.

Step 2:   Choosing the research instruments

Occupational Personality Questionnaire (OPQ32n)

The Occupational Personality Questionnaire (OPQ) was developed by Saville & Holdsworth, which ensured from the beginning that the scales of the OPQ32 are relevant to and acceptable in the workplace, as well as comprehensive in terms of the personality variables covered (Saville & Holdsworth, 1999a).

An eclectic approach, using several personality trait theories, was followed in the development of the OPQ32, as well as sound psychometric principles in order to provide the user with reliable and accurate information (Saville & Holdsworth, 2004). The item content is also appropriate for use with people from different ethnic and gender groups (Saville & Holdsworth, 1999a).

As indicated, the OPQ32 is an international occupational model of personality, describing 32 dimensions or scales of people's preferred or typical styles of behaviour at work. The content of the OPQ32 model deals with personality characteristics important to a wide variety of roles (Saville & Holdsworth, 1999a). It is, however, important to note that extensive research was done on the functioning of the OPQ in

the South African context, which led to the development of a South African version of the OPQ concept model (Saville and Holdsworth, 2004).

The OPQ32 requires respondents to consider a statement and then to indicate their responses on a five-point scale ranging from "strongly agree" to "strongly disagree". There are 230 statements for each respondent to consider (Saville & Holdsworth, 2004).

The internal consistency reliabilities range from 0.67 to 0.88, with a median of 0.81. In terms of gender differences, women's internal consistency reliabilities range from 0.66 to 0.88 (Saville & Holdsworth, 1999b).

The OPQ have good face validity for occupational use. The inductive approach and job analytic techniques used in developing the OPQ are conducive to content validity. This high content validity justifies the use of the questionnaire in the work environment. Construct validity ranges from -0.44 to 0.40 on the various scales of the questionnaire (Saville & Holdsworth, 1999b).

Orientation to Life Questionnaire (OLQ)

The Orientation to Life Questionnaire (OLQ) is used to measure sense of coherence. The questionnaire consists of 29 items. There are 11 items measuring comprehensibility, 10 measuring manageability and eight measuring meaningfulness. Respondents are provided with 29 self-reporting questions on various aspects of life and each has seven possibilities. The respondent is requested to mark the number that is most applicable to her, with 1 and 7 being the extreme answers (Antonovsky, 1987).

The test-retest reliability proves to be 0.54 and the scales dispose of a high content and construct validity (Antonovsky, 1993). Antonovsky (1993) also concludes that the OLQ is a reliable instrument to measure sense of coherence. Strümpfer and Wissing (1998) confirmed the reliability and validity in various South African studies. In accordance with these findings, Coetzee and Rothmann (1999), Naudé and Rothmann

(2000) and Pretorius and Rothmann (2001) found alpha coefficients of 0.89, 0.88 and 0.93 respectively for the OLQ.

Coping Orientations to the Problems Experienced (Dispositional COPE) Questionnaire

Despite many years of theory and research and the development of a variety of self-report coping instruments, researchers still do not have a comprehensive understanding of the structure of coping (Carver, Scheier & Weintraub, 1989). The structure of coping and the best way to measure it remain unresolved. Whether researchers prefer broader or narrower dimensions often depends on the research question at hand and the methodology to be employed (Suls, David & Harvey, 1996).

Carver et al (1989) identified three problems in surveying existing measures of coping processes:

- None of the pre-existing measures sampled all the domains that the developers of the COPE Questionnaire felt to be of theoretical interest.
- Other measure scales seem to suffer to a greater or lesser degree from a lack of clear focus in some items.
- Existing measure scales have been derived empirically, rather than theoretically.

In a response to the above-identified problems, Carver et al (1989) developed the COPE Questionnaire. It is a 53-item questionnaire, which includes 15 distinct scales or coping strategies. The scales require respondents to indicate the extent to which they use individual coping strategies to cope with a named event, e.g. the role-conflict experienced by the working mother.

Scores range from 1 ("I usually don't do this at all") to 4 ("I usually do this a lot"). Four items make up each sub-scale or coping style, which implies that the scores for each sub-scale can range from 4 (indicating a minimal use of a particular coping style), to 16 (indicating a maximum use of a particular coping style).

According to Carver et al (1989), the internal consistencies of the COPE Questionnaire scales all exceed 0.6, with the exception of the mental disengagement scale. Test-retest reliabilities showed reasonable stability and ranged from 0.42 to 0.89 for the different scales. Convergent and discriminant validity were also in line with expectations (Carver et al, 1989).

Step 3:   Data gathering

The data will be collected from respondents in a group format, through pre-arranged assessment sessions. At these sessions the three questionnaires will be administered to the sample group.

Consent will be obtained from the sample group by explaining the reasons for the study and by signing an indemnity form.

Step 4:   Data analysis

Descriptive statistics will be used to describe the dataset and Cronbach Alpha to determine the reliability of the instruments. Exploratory factor analysis is used to investigate the validity of the COPE. The data will be analysed through statistical analysis in order to determine the relationship between personality dimensions, sense of coherence and coping styles. It is proposed that a correlation study be used for analysing the data, more specifically the Pearson correlation and regression analysis to determine if personality dimensions and sense of coherence can act as predictors of coping styles.

Step 5:   Reporting and interpreting the empirical results

The presentation and discussion of the findings will be provided in a systematic conceptual framework.

Step 6:   **Integration of the literature review and the empirical research**

The results of the empirical study will be integrated into the findings of the literature review.

Step 7:   **Conclusion of the research**

Conclusions of the study will be formulated on the basis of the stated aims of the research study.

Step 8:   **Limitations of the research**

The formulation of limitations will be discussed with reference to the literature review and the empirical study.

Step 9:   **Recommendations**

Recommendations will be formulated to address the problem statement.

1.7   CHAPTER DIVISION

The following chapters will be presented in the following manner:

Chapter 2:   Personality
Chapter 3:   Sense of coherence and coping
Chapter 4:   Empirical study
Chapter 5:   Results and discussion
Chapter 6:   Conclusions, limitations and recommendations

1.8   CHAPTER SUMMARY

This chapter outlined the background to the proposed research and presented the problem statement, aims, paradigm perspective, research methodology and chapter

division. The next chapter will look at personality dimensions, through clarifying and defining them in terms of relevant literature.

CHAPTER 2

PERSONALITY

The objective of this chapter is to define personality, personality dimensions and theories. Research with regard to the working mother and personality dimensions will also be discussed. The chapter concludes with a chapter summary.

2.1   PERSONALITY

Despite several similarities between people, it remains a common fact that all human beings are unique and different from each other. Therefore, most differences in organisations can commonly be ascribed to differences between the employees working there. Although differences can be in terms of various aspects, ranging from intellectual to physical differences, personality differences remain one of the key differences that have to be considered, taking into consideration that personality and therefore individual differences can provide information on work motivation, productivity, job satisfaction, training interventions, selection practices and work-related problems, such as absenteeism, turnover, accidents, illness and stress (Furnham, 1992).

2.2   DEFINITION OF PERSONALITY

Personality can, however, be studied from different perspectives, of which type and trait theories are two. Type theories are theories that divide people into distinct groups, consisting of a combination of preferred behaviour that focuses on similarities between people. On the other hand, trait theories see personality as a combination of traits, which can be any characteristic way of behaving, thinking, feeling or operating, which again focuses on differences between individuals. Type and trait theories seem to complement one another, but for the purposes of this study the focus will be on personality trait theories.

In general, personality can be defined as the enduring characteristics and dispositions of a person that provide some degree of coherence across the various ways in which

people behave (Sternberg, 1994), as well as the stylistic consistencies in social behaviour that are a reflection of an inner structure and process (Furnham, 1992).

More specifically, in terms of the Personality Trait Theory, personality refers to all those fundamental traits of a person that endure over time and account for consistent patterns of responses in various situations (Furnham, 1992).

From the above definitions, it is clear that personality comprises basic long-term traits that account for the behaviour and reactions of individuals in most situations. Understanding the concept of personality, and the individual differences relating to it, will most likely enable us to predict what a person will do in real-life situations.

For the purposes of this study, personality is defined as a person's typical or preferred way of behaving, thinking and feeling (Saville & Holdsworth, 1999a). This definition complements the abovementioned definitions in that it accepts the fact that behaviour is determined by the current environment and circumstances, with the emphasis on relatively stable and enduring characteristics, which again account for the differences between individuals in their typical manner of relating to other people, approaching tasks and responding to situations in general.

2.3   PERSONALITY TRAIT THEORIES

Personality trait theories play a vital role in making sense out of people's different behavioural responses, as they provide information on different personalities and behaviour in the workplace. Understanding these theories assists people in having a better command over their preferred or typical way of behaviour.

Personality trait theories describe personality in terms of specific and combined elements, characteristics or attributes (Bergh & Theron, 2003). Personality is seen as a combination of traits. It is therefore believed that all people have essentially the same traits (Saville & Holdsworth, 1999a). People are believed to differ in terms of the extent to which they possess each trait (Sternberg, 1994).

There are various personality trait theories, but for the purposes of this study the focus is on the personality trait theories of Eysenck (1948), Cattell (1979) and the five-factor model of personality traits (McCrae & Costa, 1997).

The five-factor model of personality traits provides a useful broad-based typology of personality dimensions that represents the minimum number of dimensions/traits needed to describe personality and is often used in research regarding personality in the workplace (McCrae & Costa, 1987). Although the five-factor model of personality is not a theory of personality, McCrae and John (1992) argue that it has the basic characteristics of trait theory – that individuals can be characterised in terms of relatively enduring patterns of thought, feelings and actions; that traits can be quantitatively assessed; and that they show some degree of cross-situational consistency. It is the most widely accepted trait theory and recognises the frequent recurrence of five personality traits that account for most of the personality differences between people (McCrae & Costa, 1987, McCrae & Costa, 1999). Eysenck (1948) and Cattel (1979) also developed personality trait theories. Their theories, together with the five-factor model of personality, will be discussed.

2.3.1   Eysenck's personality theory

The personality trait theory of Eysenck (1948) recognises three personality traits, which form the basis of this theory. This theory is formed around extraversion, neuroticism and psychoticism. According to Eysenck (1952), *extraversion* can be defined as a characteristic of people who are sociable, lively and outgoing; *neuroticism* as a characteristic of people who are moody, nervous, irritable and subject to sudden and unpredictable mood swings; and *psychoticism* as a characteristic of people who are solitary, uncaring towards others, lack feeling and empathy and are insensitive and detached from others in their interpersonal relationships.

Eysenck's personality questionnaire is the instrument used to measure personality dimensions that are based on the three personality factors identified by Eysenck. This instrument is useful in describing major patterns of behaviour in human subjects, as

well as the main dimensions of personality in the context of two dimensions: emotionality and tough-mindedness.

2.3.2   Cattel's personality theory

Cattel's (1979) personality trait theory is seen by some as the most famous personality trait theory. Cattel defines personality as a person's characteristic style of thinking, perceiving and acting over a relatively long period of time and in a wide range of different situations. He distinguishes 16 personality trait factors, which he believes contributes most to the variations in people's behaviour. He also distinguishes two levels of personality traits: surface and source traits. *Surface traits* can be defined as characteristic differences between people; whereas *source traits* are defined as the underlying psychological dimensions that generate surface traits.

The 16 personality-factor questionnaire is used to measure the 16 personality dimensions based on the personality trait theory of Cattel. It measures a person's distinctive style of thinking, perceiving and acting over a comparative long period of time, as well as in a wide range of different situations. Today this instrument is commonly used for counselling, career guidance, recruitment, selection and research purposes.

2.3.3   Five-factor model of personality

The most widely accepted trait theory is the five-factor model of personality, which acknowledges five main personality traits: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness (Norman, 1963). According to this theory, *neuroticism* can be explained as a tendency to experience a dysphoric effect like sadness, hopelessness and guilt; *extraversion* as a preference for companionship and social stimulation; *openness to experience* as a need for variety, novelty and change; *agreeableness* as a willingness to defer to others during interpersonal conflict; and *conscientiousness* as a strong sense of purpose and high aspiration levels (McCrae & Costa, 1999). These five personality traits, however, appear to account for the variances in most personality questionnaires (Kline, 1993). More recently, Keyes

(2006) suggested that the big five should also explore the role of social interactions as a further trait aspect to be included, especially in more collective cultures.

The Neo Personality Inventory is the instrument used to measure the personality dimensions that are based on the five-factor model of personality. It provides a systematic assessment of the five major domains of personality: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. Today this instrument is commonly used in counselling and industrial settings, as well as for research purposes.

Eysenck (1948), Cattel (1979) and the five-factor model of personality (Norman, 1963) clearly define specific personality dimensions to consider in understanding personality. Eysenck and the five-factor model of personality are as simple as Cattell's is complex.

Both Eysenck and the five-factor model of personality identify extraversion and neuroticism as important personality dimensions. Eysenck, however, focuses additionally on psychoticsm, whereas the five factor model of personality identifies openness to experience, agreeableness and conscientiousness as additional important personality dimensions.

Cattel, on the other hand, developed a complex personality taxonomy and focuses on 16 personality dimensions, in which the broad personality factors are more narrowly defined.

Personality can, however, be defined in various ways, depending on the theoretical framework from which it is considered, but it is important to understand what is meant by personality with regard to this study.

In terms of the definition of personality, it can be concluded that personality consists of fundamental long-term dimensions/traits and it is thus important to define personality dimensions or traits.

2.4   DEFINITION OF PERSONALITY DIMENSIONS/TRAITS

Personality dimensions or traits can be seen as the building blocks of the concept of personality. These dimensions allow for empirical generalisations about how people with similar or different traits are likely to act and react (McCrae & Costa, 1999). Sternberg (1994) supports this notion and indicates that all people are essentially born with the same set of traits and that individual differences can be ascribed to the extent to which they are in possession of each dimension/trait.

Personality dimensions can thus generally be defined as psychological structures that underlie relatively stable, enduring behavioural dispositions or characteristics of individuals (Kline, 1993; Tellegen, Lykken, Bouchard, Wilcox, Segal & Rich, 1988).

From the above, personality dimensions seem to be relatively consistent and recurrent patterns of acting and reacting that simultaneously differentiate and characterise individual differences.

For the purposes of this study, personality dimensions/traits are defined as any characteristic way of behaving, thinking and feeling (Saville & Holdsworth, 1999a).

It is evident from the above that personality can be defined in broad, as well as specific ways, but for the purposes of this study personality is studied in terms of the work environment. This study therefore focuses on the occupational personality questionnaire model of personality (Saville & Holdsworth, 1999a). The discussed personality theories also form the basis of the development of the OPQ model of personality.

2.5   OPQ MODEL OF PERSONALITY

The development of this model of personality was based on an eclectic approach (Saville & Holdsworth, 1999a), using personality trait theories in general as well as the personality trait theories of Eysenck (1952) and Cattell (1979).

The OPQ model of personality became available in South Africa in 1994 and was selected due to the following reasons:

- It is technically sound and was developed according to the highest professional standards.
- It is friendly, easily understood and relevant to the world of work.
- It produces comprehensive and reliable profiles.
- It shows relatively small differences in the average response patterns of different ethnic and gender groups.
- The validity evidence for the OPQ is extensive and indisputable (Saville & Holdsworth, 2004).

The concept model was the first version of the OPQ and was developed between 1981 and 1984. The development of the OPQ concept model was based on a variety of techniques whereby initial models of personality were extensively trialled and refined (Saville & Holdsworth, 1999a).

The original development of the OPQ concept model was based on five main criteria:

- Designed specifically for the world of work.
- Avoiding clinical or obscure psychological constructs.
- Comprehensive in terms of the personality scales measured.
- Usable by human resource practitioners.
- Based on sound psychometric principles (Saville & Holdsworth, 1999a).

The OPQ32 was launched in 1999. It aimed to review and revise the concept model and was designed to be an international model of personality, reflecting the changing nature of work at the beginning of the 21st century, and to deal with personality characteristics important to a wide variety of roles (Saville & Holdsworth, 1999a). It is, however, important to note that, although the OPQ was originally developed in the United Kingdom, extensive research was done on the functioning of the OPQ in the South African context, which led to the development of a South African version of the OPQ concept model (Saville and Holdsworth, 2004). It describes 32 deductively-derived dimensions/traits of people's preferred or typical style of behaviour at work,

including relationships with people, thinking styles and feelings and emotions (Saville & Holdsworth, 1999a).

The OPQ is based on the definition that postulates that personality is concerned with a person's typical or preferred way of behaving, thinking and feeling (the conative, affective and cognitive dimensions of personality).

It is proposed that personality is concerned with three main domains:
- *Relating domain*, characterised by such traits as assertiveness, outgoingness and empathy.
- *Thinking domain*, characterised by such traits as conservatism, abstract thinking and detail consciousness.
- *Feeling domain*, characterised by such traits as anxiety, tough-mindedness and optimism (Saville & Holdsworth, 1999a).

The abovementioned domains are potentially joined by a fourth domain, the *dynamism (energies) domain*, characterised by traits such as vigour, competitiveness and decisiveness (Saville & Holdsworth, 1999a). The OPQ model is reflected in Figure 1.1.
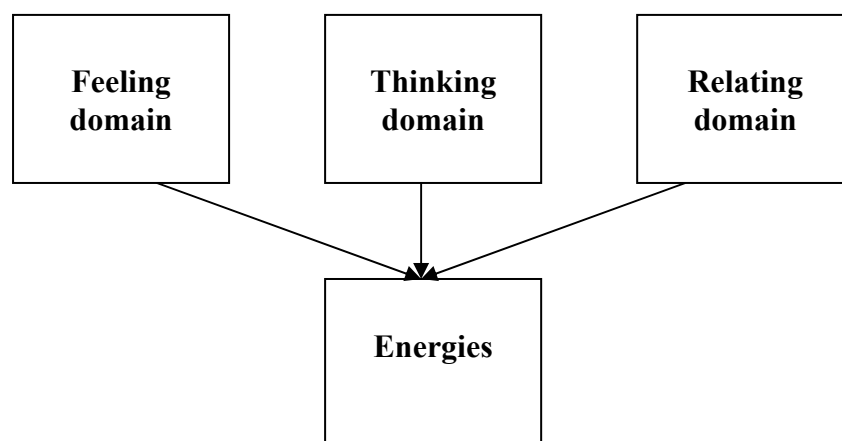
Figure 1.1:   The OPQ model of personality (Saville & Holdsworth, 1999a)

The OPQ model of personality categorises personality dimensions or traits into three domains: relationship with people, thinking style, and feelings and emotions (Saville & Holdsworth, 1999b). These domains and the personality dimensions relating to them will now be discussed.

The *relating domain* consists of the following dimensions (Saville & Holdsworth, 1999b): persuasive, controlling, outspoken, independent-minded, outgoing, affiliative, socially confident, modest, democratic and caring.

Persuasive

A person scoring low on this dimension will rarely pressurise others to change their views, dislikes selling and will be less comfortable negotiating. A person scoring high on this dimension usually enjoys selling, is comfortable negotiating and likes to change other people's views.

Controlling

Scoring low on this dimension implies that a person usually enjoys it when others take charge and dislike telling other people what to do. The opposite is evident when a person scores high on this dimension. Scoring high implies that the person likes to be in control, to take the lead and to tell others what to do.

Outspoken

A low score on this dimension implies that the person holds back from criticising others and is unprepared to put forward his own opinions. A high score implies that the person freely expresses his opinions, makes disengagement clear and is prepared to criticise others.

Independent-minded

A low score on this dimension implies that the person accepts the majority decisions and is prepared to follow the consensus. A high score implies that the person prefers to follow his own approach and is prepared to disregard the majority decision.

Outgoing

A person with a low score on this dimension is usually quiet and reserved, and dislikes being the centre of attention. A high score, on the other hand, implies that the person prefers to be lively and talkative in groups, and enjoys this attention.

Affiliative

A low score on this dimension implies that the person is comfortable spending time away from people and seldom misses the company of others. A high score implies that the person usually enjoys the company of others and easily misses the company of others.

Socially confident

A person with a low score usually feels more comfortable in less formal situations and most likely feels awkward when first meeting people. A high score implies that the person usually feels relaxed when first meeting people and at ease in formal situations.

Modest

A low score on this dimension implies that the person dislikes talking about his achievements and usually keeps quiet about personal success. A person scoring high on this dimension usually likes talking about his personal success and makes strengths and achievements known.

Democratic

A low score implies that the person is prepared to make decisions without consultation and prefers to make decisions alone. A high score, on the other hand, implies that the person usually consults widely, involves others in decision-making and is less likely to make decisions alone.

Caring

A low score on this dimension usually implies that the person can be selective with sympathy and support, and remains detached from others' personal problems. Being sympathetic, considerate, helpful and supportive towards others usually characterises a person with a high score on this dimension.

The *thinking domain* consists of the following dimensions (Saville & Holdsworth, 1999b): data-rational, evaluative, behavioural, conventional, conceptual, innovative, variety-seeking, adaptable, forward-thinking, detail-conscious, conscientious and rule-following.

Data-rational

A person with a low score on this dimension usually prefers dealing with opinions and feelings rather than with facts and figures. A high score, on the other hand, implies that the person likes working with numbers, enjoys analysing statistical information and usually bases his decisions on facts and figures.

Evaluative

A low score on this dimension implies that the person dislikes critically analysing information and rarely looks for errors or mistakes. A high score, on the other hand, implies that the person will critically evaluate information and look for potential limitations.

Behavioural

A person with a low score on this dimension does not question the reason for people's behaviour and consequently tends not to analyse people. A high score on this dimension implies that the person will try to understand the motives and behaviour of others and will enjoy analysing them.

Conventional

A person with a low score on this dimension usually favours changes to work methods, prefers new approaches and is less conventional. A high score on this dimension usually refers to a person who prefers well-established methods and favours a more conventional approach.

Conceptual

A low score on this dimension usually refers to a person who prefers to deal with practical rather than theoretical issues and abstract concepts. A high score implies that the person is interested in theories and abstract concepts.

Innovative

A low score refers to a person who is more likely to build on than to generate ideas and is less inclined to be creative and inventive. A high score, on the other hand, refers to a person who likes to generate new ideas, enjoys being creative and thinks of original solutions.

Variety-seeking

A person scoring low on this dimension usually prefers a routine and is prepared to do repetitive work, which does not include variety. A person with a high score, on the other hand, prefers variety and trying out new things. He likes changes to regular routine and can become easily bored with repetitive work.

Adaptable

A person who behaves consistently across situations and with different people will score low on this dimension. People who like to change behaviour to suit the situation and adapt their approach to the person, usually score high on this dimension.

Forward-thinking

A low score on this dimension implies that the person is more likely to focus on immediate than long-term issues and is less likely to adopt a strategic perspective. A high score, on the other hand, implies that the person tends to take a long-term view, sets goals for the future and is more likely to adopt a strategic perspective.

Detail-conscious

Scoring low on this dimension implies that the person will tend to be preoccupied with detail, less organised and systematic and will dislike tasks involving detail. A high score implies that the person will most likely focus on detail, be methodical, organised and systematic, as well as preoccupied with detail.

Conscientious

A person with a low score on this dimension usually views deadlines as flexible and is prepared to leave some tasks unfinished. A person with a high score focuses on getting things done and persists until the job is finished.

Rule-following

Scoring low on this dimension implies that the person does not restrict himself by rules and procedures, is prepared to break rules and tends to dislike bureaucracy. A person with a high score usually likes following rules and regulations, prefers clear guidelines and finds it difficult to break rules.

The *feelings and emotions domain* consists of the following dimensions (Saville & Holdsworth, 1999b): relaxed, worrying, tough-minded, optimistic, trusting, emotionally controlled, vigorous, competitive, achieving and decisive.

Relaxed

A person with a low score on this dimension usually tends to feel tense and finds it difficult to relax. A person with a high score usually finds it easy to relax, rarely feels tense and is generally calm and untroubled.

Worrying

A low score on this dimension implies that the person usually feels calm before important occasions, is less affected by key events and is free from worry. A high score implies that the person usually feels nervous before important occasions and worries about things going wrong.

Tough-minded

A person scoring low on this dimension is usually sensitive, easily hurt by criticism and upset by unfair comments or insults. A high score, on the other hand, implies that the person is not easily offended, can ignore insults and may be insensitive to personal criticism.

Optimistic

A low score on this dimension implies that the person is usually concerned about the future, expects things to go wrong and usually focuses on the negative aspects of a situation. A high score implies that the person expects things to turn out well, looks at the positive aspects of a situation and has an optimistic view of the future.

Trusting

Wary of other's intentions, finding it difficult to trust others, as well as unlikely to be fooled by people characterise a person scoring low on this dimension. Trusting other people and seeing them as reliable and honest implies that the person will score high on this dimension.

Emotionally controlled

A person with a low score on this dimension will openly express his feelings and emotions. A high score implies that the person usually conceals his feelings from others and rarely displays any emotions.

Vigorous

A person with a low score on this dimension usually likes to take things at a steady pace and dislikes excessive work demands. A high score, on the other hand, implies that the person usually thrives on activity, likes to be busy and enjoys having a lot to do.

Competitive

A person who dislikes competing with others and who feels that taking part is more important than winning will score low on this dimension. A high score, however, is characterised by a need to win and enjoying competitive activities.

Achieving

A person with a low score on this dimension usually sees career progression as less important and looks for achievable rather than highly ambitious targets. A person with a high score is usually ambitious and career-centred and likes to work to demanding goals and targets.

Decisive

Scoring low on this dimension implies that the person tends to be cautious when making decisions and likes to take time to reach conclusions. Scoring high on this dimension implies that the person likes making fast decisions, reaches conclusions quickly and is less cautious in this regard.

It is evident from the above discussion that personality plays a key role in providing information on how individuals respond to various life situations or demands. The OPQ model of personality is currently used with great success in measuring personality dimensions, specifically in the work environment. It is currently used for selection, development, counselling, team-building, leadership development, change management and performance management (Saville & Holdsworth, 1999a).

Following is a discussion of research done on personality dimensions/traits and working mothers in general, as well as personality dimensions/traits and working mothers as measured by the OPQ.

2.6   PERSONALITY AND WORKING MOTHERS

In the past 10 years there has been a substantial increase in the number of mothers entering the workplace (Statistics South Africa, 2004). This can be due to various factors, such as the implementation of the Employment Equity Act, economic circumstances forcing women to contribute to the income of the household or just the freedom women nowadays experience in entering a career of their choice.

Being a working mother does, however, have some implications in terms of her overall wellbeing (Sears & Galambos, 1993; Vosloo, 2000). On the other hand, it also has some implications for the organisation with regard to its productivity and effectiveness, as most working mothers entering the workplace are still responsible for the more traditional domestic and child care responsibilities (Douglas & Michaels, 2004; Senior, 2003).

Fulfilling these various and sometimes demanding roles of wife, mother and employee can lead to role overload and conflict (Shipley & Coasts, 1992; Vosloo, 2000). The question can thus be asked why certain working mothers function more effectively in their multiple roles than others. It is important that this question is answered and it seems that having knowledge and an understanding of the concept of personality can assist the working mother in functioning more effectively in her multiple roles.

Unfortunately, no research studies with regard to personality dimensions and working mothers were documented at the time of this research. However, research regarding personality dimensions and women have been done and will now be discussed.

In general, it seems that women tend to score low on competitiveness, aggression and the need to control others. It also seems that women are more compliant in their approach to things, with a low need for variety. It seems that women are less inclined to take a strategic approach or to view things from a long-term perspective. Women tend to be more comfortable in an environment that is expressive in nature and less structured, which gives them the opportunity to be introspective (Furnham, 1992).

Research regarding working mothers and the OPQ had also not been documented at the time of this research; but research had been documented regarding gender differences and the OPQ (Saville & Holdsworth, 1999b). Following is a discussion of the important personality dimensions that should be considered for women and consequently the working mother.

With regard to the relationship with people domain, women tend to see themselves as more outgoing, affiliative, socially confident, modest, democratic and caring, and less persuasive, controlling, outspoken and independent-minded.

On the thinking domain, it seems that women see themselves as more behavioural, conventional, detail-conscious, conscientious and rule-following, and less data-rational, evaluative, conceptual, innovative, variety-seeking and forward-thinking.

In terms of the feelings and emotions domain, it seems that women are more worrying, optimistic, trusting and vigorous, and less relaxed, tough-minded, emotionally controlled, competitive, achieving and decisive.

In conclusion, it can be proposed that being aware of typical ways of behaving, thinking and feeling can play a vital role in the life of the working mother. This awareness can possibly assist her in managing her multiple roles and everyday demands more effectively.

2.7   CHAPTER SUMMARY

In this chapter the terms personality and personality dimensions were defined. Typical models of personality were mentioned, focusing on the Occupational Personality Questionnaire (OPQ) model of personality. The originations of the OPQ model of personality were discussed, as well as the OPQ32n and the various dimensions covered by the OPQ32n.

The next chapter will look at the concepts of sense of coherence, coping and coping styles. These concepts will be explored, clarified and defined in terms of the relevant literature.

Herewith, the first literature review objective – to explore, clarify and define personality dimensions – was achieved. The first research question was also answered.

CHAPTER 3

SENSE OF COHERENCE AND COPING

The objective of this chapter is to clarify the salutogenic paradigm and to define the concept and dimensions of sense of coherence. Coping, coping styles and models will also be defined and discussed. The chapter concludes with a chapter summary.

3.1   SALUTOGENIC PARADIGM

The salutogenic paradigm, as proposed by Antonovsky (1979), focuses on people's ability to be healthy and resilient under stressful conditions, as well as their ability to cope optimally with everyday life. The focus point within this paradigm is on positive, optimal conditions of psychological health and the strength individuals exhibit in order to manage the tension and stress in their lives and not to fall ill. This approach views stress as a dynamic, manageable process that generates positive outcomes and effective coping and functioning. A variety of constructs are represented in this paradigm, which share a common goal in that they approach everyday living in a healthy, optimal manner (Viviers, 1998).

The constructs that are most often utilised in describing the salutogenic resources in human behaviour are a sense of coherence (Antonovsky, 1987), hardiness (Kobasa, 1979), learned resourcefulness (Rosenbaum, 1988), internal locus of control (Rotter, 1966), potency (Ben-Sira, 1985), stamina (Thomas, 1981) and self-efficacy (Bandura, 1977). Sense of coherence can, however, be seen as the central construct of the whole paradigm as it is most frequently utilised, and therefore the focus of this study.

The salutogenic paradigm – more specifically, sense of coherence – plays a vital role in understanding optimal, healthy and positive functioning in the workplace. As mentioned, for the purposes of this study the focus is on sense of coherence, which will now be discussed.

3.2   SENSE OF COHERENCE

Sense of coherence can be seen as a central concept of the salutogenic paradigm, as it deals with how people manage stress and maintain wellness.

3.2.1   Definition of sense of coherence

According to Antonovsky (1979), sense of coherence can be defined as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected.

Antonovsky (1979) is of the opinion that the human condition is stressful and rejects the assumption that stressors are inherently bad. The salutogenic model assumes that stressors may have optimal, healthy consequences (Antonovsky & Bernstein, 1986).

As mentioned above, stressors are widespread and neutral in their health consequences. Some people maintain their position on the health continuum and some move even closer to the wellness pole. The implications of the stressor thus depend on the person's response to the stressor. If the tension is poorly managed, stress will result and the potential for disease will increase. On the other hand, if it is managed effectively, the stressor will remain neutral or even became more health-enhancing. The question that can thus be asked is "how can we learn to live, and live well, with stressors and possibly turn their existence to our advantage" (Antonovsky, 1984b; Strümpfer, 1990).

Sense of coherence can be seen as an internalised sense of control, which guides an individual's orientation towards events. Sense of coherence consists of three core, interwoven dimensions: comprehensibility, manageability and meaningfulness (Antonovsky, 1987), which will now be discussed.

3.2.2 Dimensions of sense of coherence

Comprehensibility can be seen as the extent to which individuals perceive stimuli that confront them as making cognitive sense; as information that is ordered, structured and clear, rather than chaotic, disordered, random, accidental and predictable (Antonovsky, 1984a). The individual finds certain logic in the sequence of events; a degree of consistency from one experience to another; and the belief that unexplainable events do not occur (Sullivan, 1993).

Manageability can be defined as the extent to which people perceive that resources are at their disposal and are adequate to meet the demands imposed by stimuli (Antonovsky, 1984a). Life doesn't become unmanageable and overwhelming, but rather endurable (Sullivan, 1993).

Meaningfulness refers to the degree of commitment one has to various life domains and the importance of shaping not only one's destiny, but also one's daily experiences. High meaningfulness includes the feeling that life makes sense emotionally (Antonovsky, 1984a).

With regard to the different dimensions, it can be concluded that a person with a strong sense of coherence, functioning effectively, will be motivated to cope (meaningfulness), will believe that the challenge is understood (comprehensibility) and will believe that the resources to cope are available (manageability) (Antonovsky, 1984a).

3.2.3 Sense of coherence effectiveness

The concept of sense of coherence indicates that stressors are seen as positive and meaningful challenges, which could be managed in a way that results in optimal outcomes. An individual functioning with this view of life is usually resistant to the effects of stress and is more capable of experiencing stressful situations without feeling the negative effects thereof (Antonovsky, 1993).

Strümpfer (1990) indicates that sense of coherence does not only refer to how people stay healthy, but also the impact it has on how work is approached and performed.

A strong sense of coherence would result in a person:
- making cognitive sense of the workplace, perceiving stimuli as clear, ordered and consistent;
- perceiving work as consisting of experiences that are bearable with challenges that can be met by availing oneself of personal resources under the control of legitimate others; and
- making emotional and motivational sense of work demands and viewing them as welcome challenges, worthy of engaging in and investing energy in.

Antonovsky (1987) is of the opinion that a strong sense of coherence is not a coping style. Stressors in life are varied and there are many possible coping procedures. Consistently adopting only one pattern of coping is failing to respond to the nature of the stressor and therefore decreasing the chances of successful coping. A person with a strong sense of coherence will select the particular coping style that seems most appropriate for dealing with the stressors being confronted.

With regard to the workplace, employees with a salutogenic approach to life will thus search for meaning and resolution and will not seek to escape the burden of stressors. They will appraise work and its demands as challenging and beneficial, rather than threatening. The employee will see work and its associated stressors as an opportunity to grow, reach self-fulfilment and to optimise life.

It seems that employees with a strong sense of coherence would be an asset to an organisation, leading to a productive and effective organisation. Sense of coherence will be measured by the Orientation to Life Questionnaire (OLQ), which will now be discussed.

3.2.4. Orientations to Life Questionnaire

Antonovsky (1987; 1993) developed the Orientation to Life Questionnaire (OLQ) by using experimental subjects who had experienced serious trauma in their lives, for example, serious financial problems. A precondition for the inclusion of any of the experimental subjects was that they had to be characterised by other people as individuals who functioned remarkably well in spite of the trauma they had experienced. The questionnaire includes three components of sense of coherence: comprehensibility, manageability and meaningfulness. The OLQ was developed to operationalise the construct of sense of coherence, and the higher the score on the OLQ, the stronger the respondent's sense of coherence.

3.3   COPING

Coping can be linked to the construct of sense of coherence as it can be seen as a resource that is used in the management of tension in everyday living. It assists individuals in making sense out of stressful encounters that result in the development of an individual's sense of coherence, for example. Coping also plays an important role in understanding optimal, healthy and positive functioning in the workplace.

3.3.1   Definition of coping

People are responsive beings and usually try to avoid being harmed by life's strains. They often embark on individualised defences in an attempt to defend themselves against threats that arise in their highly individualised situations. In terms of this, coping can be seen as any response to external life strains that serve to prevent, avoid or control emotional distress – a process inseparable from life strains and the inner emotional life experienced by people (Pearlin & Schooler, 1978).

Coping resources play an important role in the stress-illness relationship, as well as in the intervention process regarding effective coping. The ability to cope with stressors is dependable on the coping resources available to the individual, which can be defined as stable characteristics of the individual or the social environment in which the individual functions (Houtman, 1990).

Lazarus and Folkman (1984) define coping as a constantly changing cognitive and behavioural effort aimed at managing specific internal and/or external demands that are appraised as taxing or exceeding the resources of the person. They see coping as a dynamic process that change over the course of a stressful transaction between people and their environment (Lazarus & Folkman, 1984). Coping is thus conceptualised as a transactional process or exchange between a person and his environment, with an emphasis on process.

Carver et al (1992) define coping as an effort to create conditions that permit a person to continue moving toward desired goals or efforts to disengage from goals that are no longer seen as attainable.

The above researchers, however, recognise that individual differences affect coping in two ways:

- Stable coping strategies (dispositional) may be used without any reference to stressful demands (Carver et al, 1989). People also use various coping responses (situational) based on the nature of events, the assessment of events or their own resources (Lazarus & Folkman, 1984).
- Personality dimensions/traits may also predict or correlate with certain coping behaviour (Eksi, 2004).

With regard to personality dimensions/traits that can be linked to coping behaviour, Storm and Rothman (2003) found that emotional stability, extraversion, openness to experience and conscientiousness are associated with constructive coping styles. They have also reported that passive coping styles are associated with neuroticism, low agreeableness and conscientiousness. Ferguson (2001), McCrae and Costa (1986) and Vollrath (2001) found a positive relationship between neuroticism and avoidance coping styles. They also reported that extraversion can be linked to problem and emotional-focused coping (seeking social support, positive thinking, optimism, venting of emotions), openness to experience humour, rethinking, seeking new information, agreeableness to seeking social support and conscientiousness to problem-focused coping such as active and planned behaviour.

It can be argued that coping is best understood and evaluated in the context of the problems people experience and the potential emotional impact of those problems. The behaviours, cognitions and perceptions in which people engage when actually dealing with their life problems can be seen as coping. It represents some of the things people do, as well as the efforts they embark on to deal with the life-strains they encounter in their different roles (Pearlin & Schooler, 1978).

It is also evident that these coping responses can be influenced by the psychological resources of an individual – the personality dimensions/traits that people draw upon to help them withstand threats posed by events and objects in their environments (Pearlin & Schooler, 1978).

For the purposes of this study, coping is thus defined as the different strategies people apply in the management of their circumstances. Following is a discussion of the models of coping.

3.3.2 Models of coping

Conceptualisations of coping can be categorised according to the assumptions about the primary determinants of coping responses. Dispositional approaches to coping assume that relatively stable person-based factors underlie the selection of coping behaviour, whereas contextual approaches to coping postulate that more temporary situation-based factors shape people's choices of coping responses (Holahan, Moos & Schaefer, 1996).

It is, however, important to note that dispositional and contextual approaches to coping complement each other in describing the coping process.

Lazarus and Folkman's model of stress (1984), as well as Carver and Scheier's (1998) model of self-regulation, will now be discussed, as both of them were used in the development of the COPE Questionnaire (measuring dispositional and situation-specific coping tendencies) that is used in this study (Carver et al, 1989).

3.3.2.1 Lazarus's model of stress

Psychological stress experienced by people represents the comparison between the powers of the environmental demands to harm, threaten or challenge and the psychological resources of the person to manage these demands (Lazarus, 1999). Stress entails the perception of threat, loss or challenge. Threat represents the occurrence of something bad or harmful. Loss is the perception that something bad or harmful has already happened. Threats and losses are conditions that either prevent or impede the maintenance or attainment of desired goal values for the individual. Loss prevents the continued existence of a desired state of affairs and threat implies forthcoming interferences with continued searches of desired activities, goals or conditions (Lazarus, 1996; Lazarus & Folkman, 1984).

If a person's resources are more or less equal to or exceed the demands of the environment, a no-stress situation occurs. Stress becomes powerful when the individual struggles with the demands of the environment that cannot easily be met. Thus, if the demands of the resources become too great, a person may feel overwhelmed in terms of dealing with the demands to which he is exposed. This can result in feelings of panic, hopelessness and even depression (Lazarus, 1999).

A person is under stress only when circumstances defeat or endanger important goal commitment and situational intentions or violate highly valued expectations. The degree of stress experienced is linked to how strong these goal commitments are and partly to the beliefs and expectations they create (Lazarus, 1966; Lazarus & Folkman, 1984; Lazarus, 1999).

According to Lazarus (1999), a stressful person-environment relationship can be described as the relative balance of forces between environmental demands and the person's psychological resources for dealing with them.

Lazarus and Folkman (1984) propose that stress consists of three processes: primary appraisal (the process of perceiving a threat to oneself); secondary appraisal (the process of bringing to mind a potential response to the threat); and coping (the process of executing these responses).

Although these processes are described as linear, they do not occur in an unbroken stream. An outcome of one process may reinforce a preceding process. The entire set of processes may cycle repeatedly in a stressful transaction (Lazarus & Folkman, (1984).

It is evident that Lazarus's model of stress focuses on the balance an individual holds between the demands of the environment and the resources available to handle these demands. Being able to manage the demands effectively through deploying the right resources will thus lead to optimal coping.

3.3.2.2 Carver's model of behavioural self-regulation

According to Austin and Vancourt (1996) and Elliott and Dweck (1988), human behaviour is organised around the pursuit of goals and these goals energise and direct activities. Goals give meaning to people's lives and it is thus important to understand a person's goals if one is to gain a better understanding of the person. According to this model, the self consists partly of the person's goals and the organisation of these goals.

Goals differ in many ways. Some are approach goals and others are avoidance goals (anti-goals) (Carver & Scheier, 1998). They are inter-correlated in a hierarchical manner and the hierarchical organisation implies that not all goals are equal in importance. The higher the goals are in the hierarchy, the closer and more important they would be to the core self of a person and vice versa.

Lower level goals also hold some importance. The more directly the attainment of a lower level goal contributes to the attainment of a valued higher level goal, the more important the lower level goal would be. A lower level act that contributes to attaining several higher level goals at once is more important than an act that contributes to the attainment of only one such goal. It is thus clear that there is a link between a person's goals and his actions (Carver & Scheier, 1998).

Goals play a valuable role in this link and serve as reference values in the attainment of goals. The feedback loop in this process is usually made up of four elements: an

input function, a reference value, a comparator and an output function (Carver & Scheier, 1998).

An input function can be seen as a sensor, a source of information about what exists, for example, perception. The reference value is the second source of information and can be seen as a goal. The comparator makes comparisons between the input function and the reference value. The comparison refers to one or two outcomes: the values being compared are either different from one another or similar to each other. The comparator can, however, vary in sensitivity, meaning that it may be able to detect very small discrepancies or it may detect only much larger ones (Carver & Scheier, 1998).

The output given by the comparison can be seen as behaviour, but it is important to remember that this behaviour can be internal or external. If the comparison gives a "no difference", the output function remains as it was. It may mean no output or it may mean that the ongoing output continues at its current level. If the comparison gives a discrepancy, the output function changes (Carver & Scheier, 1998).

According to Carver and Scheier (1998) there are two kinds of feedback loops, corresponding to two kinds of goals. In a discrepancy reducing loop, the output function is aimed at minimising any discrepancy detected between the input and the reference value. The conformity of input to the reference value is seen in attempts to approach or attain valued or desired goals. Recognising a discrepancy increases attempts to change output.

In a discrepancy enlarging loop the aim is avoidance. Current conditions are evaluated and compared to anti-goals, whereby the discrepancy between the two is enlarged. When there are no discrepancies, there is no need for avoidance (Carver & Scheier, 1998).

According to the self-regulatory model, people usually experience feelings during their actions and affect usually arises through the operation of a second feedback loop. The second process operates simultaneously with the behaviour-guiding system, as well as parallel to it. The perceptual input for the affect-creating loop is a

representation of the rate of discrepancy reduction in the action system over time (Carver & Scheier, 1998).

Although success in goal attainment often yields a positive affect, it is important to remember that the context in which goal attainment occurs can have a large influence on whether or not a positive affect is experienced.

Positive feelings are usually experienced when an action system is doing well at what it is organised to do. Approach systems are organised to reduce discrepancies. When approach systems are making good progress towards desired goals, a positive effect is experienced, for example, reaching desired goals. When satisfactory progress is not being made, the effect turns negative. Avoidance systems function to enlarge discrepancies. If avoidance systems are doing well at what they are organised to do, distancing the person from anti-goals, positive affects should be experienced, for example, avoiding undesired goals. If they are doing poorly at what they are organised to do, the effect experienced should be negative (Carver & Scheier, 1998).

Goals vary in specificity, from general to particular and from concrete to specific. Behaviour is best predicted when the specificity of the expectancy matches that of the behaviour. If the expectations for the desired outcome are sufficiently favourable, the person renews efforts to work towards the goal. If doubts are strong enough, the result is pressure to disengage from further efforts, and even from the goal itself (Carver & Scheier, 1998).

The model of self-regulation characterises the structure of normal everyday behaviour and the principles are applicable to human behaviour in general. Some human goals are highly valued and important to the people who hold them. Other goals are trivial, concerned with professional achievement or the maintenance and nourishment of human relationships (Carver & Scheier, 1998).

According to Carver et al (1992), the behaviour linked to these disparate goals has a common structure and the structure is well explained by their model of self-regulatory behaviour. From this viewpoint, stress is a particular class of experience and coping is the response that follows these experiences. Stress occurs when people experience

impediments to attaining desired goals or avoiding anti-goals. Coping is an effort to create conditions that permit the person to continue to move towards desired goals, or efforts to disengage from goals that are seen as no longer attainable.

It is evident that Carver's model of behavioural self-regulation focuses on the importance of attaining important goals in an effortless manner. Being able to attain important goals or deploying effective strategies to attain important goals will lead to optimal coping.

Lazarus's model of stress focuses on the balance an individual holds between the demands of the environment and the resources available to handle these demands, whereas Carver's model of self-regulation focuses on the attainment of goals that are seen as important by the individual. Both models explain how the environment impacts on individuals and how the management thereof can lead to effective coping behaviour.

From the above it is evident that coping can be viewed in various ways.

3.3.3   Definition of coping styles

According to Lazarus and Folkman (1984: p14), coping styles are coping patterns that seem to be habitual, with some degree of stability by correlating coping thoughts and actions in the same person over time and across conditions. They are actions that are characteristic of the individual, with stability and consistency over time and across conditions.

The transactional perspective of Lazarus (1966) defines two types of coping: problem-focused coping and emotion-focused coping. Problem-focused coping can be defined as coping behaviour aimed at solving the problem or doing something to change the source of stress, whereas emotion-focused coping is aimed at reducing or managing the emotional distress that is associated with a situation (Carver et al, 1989).

Carver et al (1989) distinguished between five types of problem-focused coping styles: active coping, planning, suppression of competing activities, restraint coping and seeking social support for instrumental reasons.

Active coping

This is the process of taking active steps to try to remove or avoid the stressor or to restructure its effects. Active coping includes initiating direct action, increasing one's efforts, and trying to execute a coping attempt in a stepwise fashion.

Planning

This involves coming up with action strategies, thinking about what steps to take and how best to handle the problem. It is thus thinking about how to cope with a stressor.

Suppression of competing activities

This is about the suppression of competing activities or the suppression of competing channels of information. It involves putting other projects aside, trying to avoid becoming distracted by other events, even letting other things slide in order to deal with the stressor.

Restraint coping

This involves waiting until an appropriate opportunity presents itself to act, holding oneself back and not acting ahead of time. This is an active coping style; the person's behaviour is focused on dealing with the stressor effectively, but also passive in terms of using self-control by not acting.

Seeking social support for instrumental reasons

This involves seeking social support in terms of seeking advice, assistance or information.

Five types of emotion-focused coping styles are also distinguished (Carver et al, 1989): seeking social support for emotional reasons, positive reinterpretation and growth, acceptance, turning to religion and denial.

Seeking social support for emotional reasons

This involves seeking social support in terms of getting moral support, sympathy or understanding.

Positive reinterpretation and growth

This is an attempt to manage stressful emotions rather than dealing with the stressor per se.

Acceptance

A person who accepts the reality of a stressful situation would seem to be a person who is engaged in an attempt to deal with the situation.

Turning to religion

Turning to religion might serve as a source of emotional support, as a mechanism for positive reinterpretation and growth, or as a tactic of active coping with a stressor. It assesses in a general way the tendency to turn to religion in times of stress.

Denial

This is characterised by a refusal to believe that the stressor exists or trying to act as though the stressor is not real.

Less used coping styles (Carver et al, 1989) are:
- *Focus on and venting of emotions:* Focusing on whatever one is experiencing as distress and venting those feelings.

- *Behavioural disengagement:* Reducing one's effort to deal with the stressor and giving up attempts to attain the goals with which the stressor is interfering.

- *Mental disengagement:* Any of a variety of activities that serve to distract the person from thinking about the behavioural dimension or goal with which the stressor is interfering. This involves activities like day-dreaming and escaping through sleep.

Although coping can change from moment to moment, people develop habitual ways of dealing with stress and these habits or coping styles can influence their reactions in new situations (Carver & Scheier, 1994).

Coping styles make a difference to the emotional wellbeing of people. The greater the scope and variety of the individual's coping repertoire, the more protection coping gives that person (Pearlin & Schooler, 1978). Thus, what people do, or fail to do, makes a difference in their wellbeing and coping effectiveness.

The Coping Orientations to the Problems Experienced (COPE) Questionnaire is used to measure coping styles and will now be discussed.

3.3.4. Coping Orientations to the Problems Experienced (COPE) Questionnaire

Lazarus and Folkman's (1984) transactional perspective did not examine the correlation between personality and coping. A third generation of research emerged, however, that was responsible for the renewed interest in the link between personality and coping.

According to Suls, David and Havey (1996), there is still no comprehensive understanding of the structure of coping, despite many years of theory and research and the development of a variety of self-report coping instruments. The structure of coping and the best way to measure it thus remains unresolved.

The COPE Questionnaire (Carver et al, 1989) asserted that most other existing measures of coping did not sample all the specific domains of coping that are of

theoretical interest. Carver et al (1989) argue that each broad type of coping (emotional and problem-focused coping) may involve several distinct strategies (for example, denial, seeking social support), each possibly having very different implications for adjustment.

Carver et al (1989) were of the opinion that the problem and emotion-focused coping mechanisms of Lazarus and Folkman (1984) were an important distinction. However, they have proven to be too simple.

They distinguished three problems with existing measures of coping:

- None of the pre-existing measures sampled all of the specific domains that were felt to be of theoretical interest.
- The scales suffer to a greater or lesser degree from a lack of clear focus in some items.
- The development of the scales tends to be linked to theoretical principles in a somewhat loose and post hoc manner.

The COPE Questionnaire, however, addresses the above issues and it is important to remember that Lazarus's model of stress (1984) and Scheier and Carver's model of behavioural self-regulation (1988) were used in the development of this instrument (Carver et al, 1989).

The COPE Questionnaire incorporates 13 conceptually distinct scales. Most of these scales are based on specific theoretical arguments about functional properties of coping, whereas the other scales are included because previous research indicated that the coping tendencies they reflect may be either valuable or may impede adaptive coping (Carver et al, 1989).

The coping qualities measured by the COPE Questionnaire were derived from a consideration of the structure of motivated action. Coping is not fundamentally different from other motivated action, except that coping may reflect greater urgency. The COPE Questionnaire reflects a range of self-regulated functions (Carver et al, 1989).

3.3.5   Coping effectiveness

People tend to use both emotion-focused and problem-focused coping in managing stressful events. This approach appears to be functional, for it allows for both the regulation of emotion and the management of the stressor (Lazarus & Folkman, 1984). Both coping strategies are viewed as functional for regulating emotions and managing the actual stressor. Using different strategies in different combinations may be a better way to manage stress than responding reflexively with the same limited response to varying stressors.

To ensure personal coping effectiveness, it is necessary to incorporate relevant problem-solving and/or emotion-focused coping skills. Although greater flexibility may relate to better emotional adjustment (Mattlin, Wethington & Kessler, 1990), multiple coping reactions within a given period may reflect ineffective coping (Carver, Pozo, Harris, Noriega, Scheier, Robinson, Ketchan, Moffat & Clark, 1993). A number of studies concluded that having a versatile coping profile is associated with good adjustment (Mattlin et al, 1990; Pearlin & Schooler, 1978). This is, however, not true across the board, for example, in occupational stress, being able to call on more coping mechanisms does not minimise the chances that role strain will result in emotional stress (Pearlin & Schooler, 1978). Each coping style has both its benefit and its costs.

Research has emphasised the positive effects of problem-focused coping and the negative effects of emotion-focused coping on psychological outcomes, especially when the stressful situation can be improved by the person's responses (Lazarus & Folkman, 1984). Although emotion-focused coping may help to maintain emotional balance, an adaptive response to rectify the situation still requires problem-solving activities to manage the threat.

Research on avoidance coping is mixed. Data indicates that avoidance coping in general is positive, related to concurrent distress and may have negative consequences (Aldwin & Revenson, 1987; Billings & Moos, 1981). Carver at al (1992) suggest that avoidance coping (wishful thinking, escapism, overt effort to deny, self-destruction

and mental disengagement) typically work against people, rather than to their advantage.

On the other hand, research done by Suls and Fletcher (1985) indicates that cognitive avoidance may be an effective manner to cope with short-term stress. Carver et al (1992) conclude that avoidance coping may be useful at times because it gives the person a psychological breather and an opportunity to escape from the constant pressures of the stressful situation.

Active coping is preferred by most people and is seen to be highly effective in stress reduction (Gal & Lazarus, 1975). It provides the person with a sense of mastery over the stressor, as well as diverting the person's attention from the problem when engaged in task-orientated behaviour. Research done by Aldwin and Revenson (1987) and Aspinwall and Taylor (1992) supports the relationship between active coping and wellbeing.

Mattlin et al (1990) reported the opposite effect. These researchers have found that passivity and versatility are associated significantly with adjustment to stress; that the associations differ across situations; and that it helps to interpret the effects of separate coping strategies.

The results of a given coping style are thus determined by the interaction of personal needs and preferences and the constraints of the current situation. Applying the same coping style across all situations is not likely to be adaptive (Collins, Taylor & Skokan, 1990). Specific coping strategies are more or less effective, depending on the type of stressor encountered (Pearlin & Schooler, 1978).

A good fit between the realities of the situation and coping methods is important. Problem-focused coping is seen as more adaptive in a situation viewed as changeable, whereas emotion-focused coping is best used in unalterable situations (Lazarus & Folkman, 1984). Factor analytical studies have also suggested a cluster of theoretically adaptive styles, namely active coping, planning, seeking social support, suppression of competing activities, restraint coping, positive reinforcement and positive reappraisal. Coping styles that were found to be ineffective were denial,

behavioural disengagement, focusing on emotions and alcohol and drug abuse. These coping styles usually provide the person with a brief relief and ultimately lead to the person being worse off (Carver et al, 1989).

In terms of the workplace, adopting an effective coping style can be seen as being very important as this will have a definite impact on individual effectiveness, which will again have an impact on various organisational factors, for example productivity, organisational effectiveness, job satisfaction and turnover.

3.5   CHAPTER SUMMARY

In this chapter sense of coherence was defined and discussed, as well as the OLQ measuring this concept. Coping, coping styles and coping effectiveness were defined. Typical coping models were discussed, focusing on Lazarus's model of stress, as well as Carver's model of behavioural self-regulation. The COPE Questionnaire was discussed, as well as the various coping styles covered by this questionnaire.

Next the integration of personality, sense of coherence and coping will be presented from the relevant literature. The next chapter will focus on the empirical study.

Herewith the second literature review objective – to explore, clarify and define coping and sense of coherence – was reached. The second research question was also answered.

INTEGRATION OF PERSONALITY DIMENSIONS, SENSE OF COHERENCE AND COPING STYLES

Conducting integrative research is important as it allows the researcher to describe and test the relationship between variables and to determine the strength of multiple predictions (Long & Kahn, 1993). The objective of this section is to postulate a theoretical relationship between personality dimensions, sense of coherence and coping styles, with specific reference to the working mother.

Working mothers face various challenges today, one of which is to be a mother, wife, caretaker and employee all at the same time. Fulfilling these challenging and sometimes demanding roles can contribute to role overload and conflict, which can have a negative impact on organisational effectiveness, as well as the overall well-being of the working mother (Chusmir & Durand, 1987; Sears & Galambos, 1993; Vosloo, 2000). Understanding personality dimensions, sense of coherence and coping styles can assist the working mother to function more effectively in her multiple roles.

Personality dimensions are the psychological structures that underlie relatively stable, enduring behavioural dispositions or characteristics of individuals – the characteristic way of behaving, thinking and feeling (Saville & Holdsworth, 1999a). Understanding personality and the various dimensions thereof will assist the working mother in gaining a better understanding of the consistent and recurrent patterns of behaviour she displays.

Sense of coherence is the global orientation that expresses the extent to which the individual has a pervasive, enduring, though dynamic feeling of confidence; that the stimuli deriving from the internal and external environments in the course of living are structured, predictable and explicable; that the resources are available to meet the demands posed by these stimuli; and that these demands are challenges worthy of investment and engagement (Antonovsky, 1979). Sense of coherence predicts the extent to which the individual feels that there is a probability that things will work out well. The focus is on factors that promote coping and wellbeing as a health-orientated approach to coping is adopted.

Sense of coherence refers to an internalised sense of control, which guides the orientation to coming events. The sense of coherence concept helps individuals to understand the various facets of control and its consequences through their experience with the environment and leads to anticipatory health-promoting orientations (Rothmann & Van Rensburg, 2002). Understanding sense of coherence will assist the working mother in gaining a better understanding of moving to health-promoting behaviour.

Coping is a response to external life stressors, which serves to prevent, avoid or control emotional distress. An individual's ability to cope with stressors depends on the psychological coping resources available. These resources can be seen as stable characteristics of individuals, assisting them in using different coping styles in the management of their circumstances (Houtman, 1990). Understanding coping and the various coping styles will assist the working mother in gaining a better understanding of her preferred way of coping.

South African research done by Storm and Rothmann (2003) with regard to personality dimensions and coping styles found that emotional stability, extraversion, openness to experience and conscientiousness are associated with constructive coping styles, such as active problem-solving, seeking social support (instrumental reasons), positively reinterpreting stressful situations and accepting stressors. Agreeableness and conscientiousness are associated with an acceptance of stressors and turning to religion. On the other hand, passive coping styles, such as focusing on venting emotions, denial and seeking social support (emotional reasons) are associated with neuroticism, low agreeableness and low conscientiousness.

Fergusen (2001), McCrae and Costa (1986) and Vollrath (2001), found a positive relationship between neuroticism and avoidance-type coping styles, including behaviour such as wishful thinking, escapist fantasies, withdrawal, self blame, passivity and indecisiveness. Extraversion can be linked to problem and emotional-focused coping styles, such as seeking social support, positive thinking, optimism, high energy, rational action and venting emotions. Openness to experience can be linked to coping styles such as humour, rethinking and seeking new information. Agreeableness seems to be associated with trust and seeking social support, whereas

conscientiousness is linked to problem-focused coping styles such as active, rational and planned behaviour. With regard to this research and the OPQ dimensions, it seems that the following dimensions are important to consider; outgoing, affiliative, socially confident, detail-conscious, conscientiousness, worrying, optimism, trusting, variety-seeking and emotionally controlled.

In terms of the 13 coping styles identified by Carver et al (1989), it can be proposed that working mothers coping effectively will focus more on using a combination of active coping, planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons, seeking social support for emotional reasons, positive reinterpretation and growth, turning to religion, focus on and venting of emotions and acceptance for effective functioning. A combination of behavioural disengagement, mental disengagement and denial can also be used, which will contribute to less effective functioning.

The South African research of Pienaar and Rothmann (2003) categorised the above-mentioned coping styles into four categories: active coping, avoidance coping, seeking emotional support and turning to religion.

With regard to the above categorisation, it can be proposed that working mothers will make use of problem/active coping styles, as well as emotional-focused styles, such as planning, organising, prioritising, venting emotions and seeking social support for effective coping behaviour and avoidance coping strategies for ineffective coping behaviour.

It can also be proposed that problem-focused coping styles will correlate with a strong sense of coherence, which will contribute to more effective functioning and that avoidance and emotional coping styles will correlate with a low sense of coherence, which will contribute to less effective functioning.

With regard to the relationship between sense of coherence and personality dimensions, Strümpfer, Gouws and Viviers (1998) indicate that there seems to be a significant positive relationship between sense of coherence and emotional stability, whereas Ruiselová (2000) found a positive relationship between a strong sense of

coherence and lower neuroticism for both men and women. Women showed a relationship between a strong sense of coherence and higher agreeableness. With regard to the OPQ, it seems that important dimensions to consider are the democratic, caring, emotional control and worrying dimensions.

Mlonzi and Strümpfer (1998) report a positive correlation between sense of coherence and emotional stability, extraversion, independence, control and tough-poise; as well as a negative correlation between sense of coherence and measures of anxiety and neuroticism.

A working mother who understands her personality and sense of coherence will most likely be able to select a particular coping style that seems most appropriate to deal with the stressor with which she is confronted. She will be able to understand the demands presented to her, experience them as emotionally meaningful and in the end be able to manage them effectively. The possibility seems to exist that she will most likely fail to respond to the nature of the stressor and decrease her chances of coping effectively if she doesn't have an understanding of her personality dimensions and the concept of sense of coherence.

In conclusion, it can be proposed that working mothers will use problem-focused coping behaviour such as planning and organising, as well as emotion-focused coping behaviour, such as seeking social support and venting emotions, which all contribute to effective functioning (Houtman, 1990; Long & Kahn, 1993), which can be linked to a strong sense of coherence.

Some working mothers will make use of avoidance coping behaviour, such as selective ignoring, which contributes to less effective functioning, and which can be correlated to a low sense of coherence

Being able to select the appropriate coping style will most likely enable the working mother to manage her multiple roles more effectively. In the end, this will enable her to be more productive and efficient in her role as an employee.

CHAPTER 4

EMPIRICAL STUDY

According to the research procedure outlined in Chapter 1, the second phase is the empirical study, which consists of the following steps: deciding on the research design, determining the sample, deciding on the measuring instruments, conducting the research procedure and collecting data, and finally carrying out the data analysis. This chapter focuses on the choice and composition of the sample, the measuring instruments, the procedure in terms of scoring and the interpretation of the instruments in the measuring battery, as well as conducting the relevant statistical analysis used in the study. Research hypotheses are stated in terms of the present study.

4.1 SAMPLE

Following is a discussion on the sample of the study, with reference to the sampling procedure and sampling size.

4.1.1 Sample

The sample consists of 120 randomly selected working mothers, representing different ethnic groups and occupying different occupational levels in different occupational fields, organisations and industries. A prerequisite was that the individuals must be married, pursuing a career and at the same time be responsible for fulfilling the traditional family responsibilities of mother and wife. Their ages varied between 23 and 52, with their children still attending school and being under the age of 18.

4.1.2 Sampling

Of the study population ($N = 120$), a sample of 102 working mothers across various occupational levels, fields and industries responded to the questionnaires. The characteristics of the sample are shown in Table 4.1.

Table 4.1:   **Characteristics of the sample (N = 102)**

Variable	Category	Percentage
Age	21 – 30	15.69
	31 – 40	72.55
	41 – 50	9.80
	51 – 60	1.96
Ethnicity	African	5.88
	Coloured	3.92
	Indian	4.90
	White	85.29
Education	Grade 10 or below	3.92
	Grade 12	45.10
	Post matric	11.76
	Certificate	
	Diploma / Degree	25.49
	Postgraduate	13.73
Language	Afrikaans	75.49
	English	20.59
	Tswana	0.98
	Zulu	2.94
Years working	0 – 5	2.94
	6 – 10	27.45
	11 – 15	29.41
	16 – 20	31.37
	21 - 25	8.82
Number of children	1 – 2	86.27

	3 – 4	13.73
Years married	1 – 5	10.78
	6 – 10	40.20
	11 – 15	24.51
	16 – 20	18.36
	21 – 25	3.92
	26 – 30	1.96
Type of work	Administrative	85.29
	Professional	11.76
	Managerial	2.94
Industry	Medical	12.75
	Motor	1.96
	Food	42.16
	Aviation	14.71
	Educational	12.75
	Mining	7.84
	Financial	4.90
	Engineering	2.94

The sample consisted mainly of Afrikaans-speaking (75.49%) and English-speaking (20.59%) participants between the ages of 31 and 40 (72.55%), with 45.10% having Grade 12 and 25.49% having a diploma or degree. Participants were mainly white (85.29%), having between 16 and 20 years (31.37%) and 11 and 15 years (29.41%) working experience. Most of the participants had between 1 and 2 children (86.27%), had been married for between 6 and 10 years (40.20%), worked in the food industry (42.16%) and did administrative-related work (85.29%).

4.1.2.1 Role-conflict

The role-conflict information was obtained by using a self-report questionnaire developed by the researcher.The development of the questionnaire was based on research done by Vosloo (2000) and it gathered information about various aspects that impact on role-conflict, as well as the degree to which these aspects contributed to role-conflict.

The following dimensions were included:

- different roles responsible for;
- attitude towards career;
- decision to be a careerwoman;
- lack of flexibility in working conditions;
- lack of support from husband;
- lack of support from organisation; and
- number of hours work.

The characteristics of the sample with regard to role-conflict are shown in Table 4.2.

Table 4.2:   Role-conflict characteristics

Variable	Category	Percentage
Degree to which participants experience role-conflict	Low	19.61
	Average	52.94
	High	27.45
Degree to which attitude towards career influences role-conflict	Low	42.16
	Average	32.35
	High	25.49

Degree to which choosing to be a careerwoman influences role-conflict	Low	39.22
	Average	38.24
	High	22.55
Degree to which lack of flexible working conditions influences role-conflict	Low	36.27
	Average	33.33
	High	30.39
Degree to which lack of support from husband influences role-conflict	Low	57.84
	Average	19.61
	High	22.55
Degree to which lack of support from the organisation influences role-conflict	Low	52.94
	Average	25.49
	High	21.57
Degree to which the number of working hours influences role-conflict	Low	43.14
	Average	20.59
	High	36.27

It seems that most of the participants (52.94%) experienced an average degree of role-conflict with regard to the different roles for which they are responsible, with a low degree of impact from their attitudes towards their careers (42.16%), the lack of support received from their husbands (57.84%) and their organisations (52.94%), and the number of hours worked (43.14%).

White, Cox and Cooper (1992) and May (1999) found that the majority of successful women do not report role-conflict, despite the fact that role-overload has an impact on

their lives. In their study of women managers, Naidoo and Jano (2002) also found a significant positive correlation between commitment to the work-role and commitment to the home and family role, which suggests that dual-career women may experience work and home as being complementary, rather than conflicting factors in their lives.

4.2   THE MEASURING BATTERY

In this section the development, description, administration and scoring, interpretation and the reliability and validity of the measuring instruments are discussed.

4.2.1   Measurement of personality

In the measurement of personality, it was decided to make use of the Occupational Personality Questionnaire (OPQ)32n (Saville & Holdsworth, 1999b). The development, description, administration and scoring, interpretation, reliability and validity, as well as the motivation for the use of the OPQ32n are discussed.

Development

The OPQ was developed by Saville & Holdsworth (1999b), which ensured from the beginning that the scales of the OPQ32 are relevant and acceptable to the workplace, and are also comprehensive in terms of the personality variables covered (Saville & Holdsworth, 1999a).

An eclectic approach, using several personality trait theories, was followed in the development of the OPQ32, as well as sound psychometric principles in order to provide the user with reliable and accurate information (Saville & Holdsworth, 2004). The item content is also appropriate for use with people from different ethnic and gender groups (Saville & Holdsworth, 1999a).

The content of the OPQ32 model deals with personality characteristics important to a wide variety of roles (Saville & Holdsworth, 1999a). It is, however, important to note that extensive research was done on the functioning of the OPQ in the South African

context, which led to the development of a South African version of the OPQ concept model (Saville & Holdsworth, 2004).

Description

As indicated, the OPQ32 is an international occupational model of personality, describing 32 dimensions or scales of people's preferred or typical styles of behaviour at work.

The *relating domain* consists of the following dimensions (Saville & Holdsworth, 1999b):

Persuasive

A person with a low score on this dimension will rarely pressurise others to change their views, dislikes selling and will be less comfortable negotiating. A person with a high score on this dimension usually enjoys selling, is comfortable negotiating and likes to change other people's views.

Controlling

Scoring low on this dimension implies that the person usually enjoys it when others take charge and dislike telling other people what to do. The opposite is evident when a person scores high on this dimension. A high score implies that the person likes to be in control, to take the lead and to tell others what to do.

Outspoken

A low score on this dimension implies that the person holds back from criticising others and is not prepared to put forward his own opinions. A high score implies that the person freely expresses his opinions, makes disengagement clear and is prepared to criticise others.

Independent-minded

A low score on this dimension implies that the person accepts the majority decision and is prepared to follow the consensus. A high score implies that the person prefers to follow his own approach and is prepared to disregard the majority decision.

Outgoing

A person with a low score on this dimension is usually quiet and reserved, and dislikes being the centre of attention. A high score, on the other hand, implies that the person prefers to be lively and talkative in groups, and enjoys this attention.

Affiliative

A low score on this dimension implies that the person is comfortable spending time away from people and seldom misses the company of others. A high score implies that the person usually enjoys the company of others and easily misses the company of others.

Socially confident

A person with a low score usually feels more comfortable in less formal situations and most likely feels awkward when first meeting people. A high score implies that the person usually feels relaxed when first meeting people and is at ease in formal situations.

Modest

A low score on this dimension implies that the person likes talking about their personal success and makes their strengths and achievements known. A person with a high score on this dimension usually dislikes talking about his achievements and usually keeps quiet about his personal success.

Democratic

A low score implies that the person is prepared to make decisions without consultation and prefers to make decisions alone. A high score, on the other hand, implies that the person usually consults widely, involves others in decision-making and is less likely to make decisions alone.

Caring

A low score on this dimension usually implies that the person can be selective with sympathy and support, and remains detached from other's personal problems. Being sympathetic, considerate, helpful and supportive towards others usually characterises a person with a high score on this dimension.

The *thinking* domain consists of the following dimensions (Saville & Holdsworth, 1999b):

Data-rational

A person with a low score on this dimension usually prefers dealing with opinions and feelings rather than with facts and figures. A high score, on the other hand, implies that the person likes working with numbers, enjoys analysing statistical information and usually bases these decisions on facts and figures.

Evaluative

A low score on this dimension implies that the person dislikes critically analysing information and rarely looks for errors or mistakes. A high score, on the other hand, implies that the person will critically evaluate information and look for potential limitations.

Behavioural

A person with a low score on this dimension does not question the reason for people's behaviour and consequently tends not to analyse people. A high score on this dimension implies that the person will try to understand the motives and behaviour of others and will enjoy analysing them.

Conventional

A person with a low score on this dimension usually favours changes to work methods, prefers new approaches and is less conventional. Scoring high on this dimension usually refers to a person who prefers well-established methods and favours a more conventional approach.

Conceptual

A low score on this dimension usually refers to a person who prefers to deal with practical rather than theoretical issues and abstract concepts. A high score implies that the person is interested in theories and abstract concepts.

Innovative

A low score refers to a person who is more likely to build on than to generate ideas and is less inclined to be creative and inventive. A high score, on the other hand, refers to a person who likes to generate new ideas, enjoys being creative and thinks of original solutions.

Variety-seeking

A person with a low score on this dimension usually prefers a routine and is prepared to do repetitive work, which does not include variety. A person with a high score, on the other hand, prefers variety, tries out new things, likes changes to regular routine and is easily bored by repetitive work.

Adaptable

A person who behaves consistently across situations and with different people will score low on this dimension. People who like to change behaviour to suit the situation and adapt their approach to the person, usually score high on this dimension.

Forward-thinking

A low score on this dimension implies that the person is more likely to focus upon immediate than long-term issues and is less likely to adopt a strategic perspective. A high score, on the other hand, implies that the person tends to take a long-term view, sets goals for the future and is more likely to adopt a strategic perspective.

Detail-conscious

Scoring low on this dimension implies that the person will tend to be preoccupied with detail, less organised and systematic and will dislike tasks involving detail. A high score implies that the person will most likely focus on detail, be methodical, organised and systematic, as well as preoccupied with detail.

Conscientious

A person with a low score on this dimension usually views deadlines as flexible and is prepared to leave some tasks unfinished. A person with a high score focuses on getting things done and persists until the job is finished.

Rule-following

Scoring low on this dimension implies that the person does not restrict himself by rules and procedures, is prepared to break rules and tends to dislike bureaucracy. A person with a high score usually likes following rules and regulations, prefers clear guidelines and finds it difficult to break rules.

The *feelings and emotions domain* consists of the following dimensions (Saville & Holdsworth, 1999b):

Relaxed

A person with a low score on this dimension usually tends to feel tense and finds it difficult to relax. A person with a high score usually finds it easy to relax, rarely feels tense and is generally calm and untroubled.

Worrying

A low score on this dimension implies that the person usually feels calm before important occasions, is less affected by key events and is free from worrying. A high score implies that the person usually feels nervous before important occasions and worries about things going wrong.

Tough-minded

A person scoring low on this dimension is usually sensitive, easily hurt by criticism and upset by unfair comments or insults. A high score, on the other hand, implies that the person is not easily offended, can ignore insults and may be insensitive to personal criticism.

Optimistic

A low score on this dimension implies that the person is usually concerned about the future, expects things to go wrong and usually focuses on the negative aspects of a situation. A high score implies that the person expects things to turn out well, looks towards the positive aspects of a situation and has an optimistic view of the future.

Trusting

Wary of other's intentions, finding it difficult to trust others, as well as unlikely to be fooled by people characterise a person scoring low on this dimension. Trusting other

people and seeing them as reliable and honest implies that the person will score high on this dimension.

Emotionally controlled

A person with a low score on this dimension will openly express his feelings and emotions. A high score implies that the person usually conceals his feelings from others and rarely displays any emotions.

Vigorous

A person with a low score on this dimension usually likes to take things at a steady pace and dislikes excessive work demands. A high score on the other hand implies that the person usually thrives on activity, likes to be busy and enjoys having a lot to do.

Competitive

A person who dislikes competing with others and who feels that taking part is more important than winning will score low on this dimension. A high score is, however, characterised by the desire to win and an enjoyment of competitive activities.

Achieving

A person with a low score on this dimension usually sees career progression as less important and looks for achievable rather than highly ambitious targets. A person with a high score is usually ambitious and career-centred and likes to work according to demanding goals and targets.

Decisive

Scoring low on this dimension implies that the person tends to be cautious when making decisions and likes to take time to reach conclusions. Scoring high on this

dimension implies that the person likes making fast decisions, reaches conclusions quickly and is less cautious in this regard.

Administration and scoring

The OPQ can be administered individually or in groups by using a computer or the paper and pencil method. Administration instructions are provided on an administration card which must be strictly adhered to. The OPQ32n requires respondents to consider a statement and then to indicate their responses on a five-point scale ranging from "strongly agree" to "strongly disagree". There are 230 statements for each respondent to consider (Saville & Holdsworth, 2004).

The OPQ can be scored either by hand with a hand-scoring key, or by computer using a scanner and computer software.

Interpretation

A personality profile with 32 personality scales is provided, each with a sten score out of 10. Each scale has a scale description with regard to scoring high or low on the scale, which is categorised into three groups: relationships with people, thinking style, and feelings and emotions.

Reliability and validity

The internal consistency reliabilities range from 0.67 to 0.88, with a median of 0.81. In terms of gender differences, women's internal consistency reliabilities range from 0.66 to 0.88 (Saville & Holdsworth, 1999b).

The OPQ have good face validity for occupational use. The inductive approach and job analytic techniques used in developing the OPQ are conducive to content validity. This high content validity justifies the use of the questionnaire in the work environment. Construct validity ranges from 0.44 to 0.40 on the various scales of the questionnaire (Saville & Holdsworth, 1999b).

Motivation for choice

The OPQ32n was chosen for the purposes of this study due to the fact that the instrument is relevant and acceptable to the workplace. It is also comprehensive in terms of the personality variables covered. The instrument is based on sound psychometric principles and can be used for people from different ethnic and gender groups (Saville & Holdsworth, 1999a), due to the extensive research conducted with regard to the OPQ concept model in South Africa (Saville & Holdsworth, 2004).

4.2.2   Measurement of sense of coherence

With regard to the measurement of sense of coherence, it was decided to use the Orientation to Life Questionnaire (OLQ) (Antonovsky, 1987). The development, description, administration and scoring, interpretation, reliability and validity, as well as the motivation for the use of the OLQ are discussed.

Development

Antonovsky (1987) developed the OLQ, which corresponds with the conceptual description of sense of coherence. Antonovsky (1987) based the questionnaire on the assumption that a strong sense of coherence is essential to handle stress.

The rationale of the OLQ is that it measures an individual's global orientation of coping as represented in the construct sense of coherence. It is measured in terms of three components: comprehensibility, manageability and meaningfulness. The presence of these three dimensions represents a high score, while the absence thereof indicates a low score.

Description

The OLQ consists of 29 items and Likert-type self-rating scales (Antonovsky, 1987), which are scored between 1 and 7 per item. A score of 1 indicates a low score and a score of 7 indicates a high score. A score of 4 indicates that both statements are equally relevant.

The OLQ consists of three subscales (Antonovsky, 1987):

Comprehensibility (11 items)

This scale measures the extent to which the world is viewed as ordered, predictable and clearly observable. A high score is indicative of an individual who senses that life is ordered and consistent, whereas a low score indicates a sense of chaos and randomness and a feeling that life is not cognitively understandable.

Manageability (10 items)

This scale measures the extent to which people view the world as manageable. A high score indicates that the individual is able to perceive stress as manageable and is therefore able to select appropriate resources – those under one's control or available from others or from a legitimate authority. A low score is indicative of a helpless reaction by an individual.

Meaningfulness (8 items)

This scale measures the extent to which life is viewed as meaningful. A high score indicates that an individual sees life as a challenge and worthy of commitment, whereas a low score indicates that life is seen as a burden and is reacted to in a negative way, based on self-fulfilling prophecies.

Administration and scoring

The OLQ can be administered individually or in groups (Antonovsky, 1987). The participant reads the instructions and answers the 29 items by indicating which point on the scale best describes them. There is no time limit for completing the questionnaire.

The OLQ is scored by adding the item scores of each sub-scale separately and arriving at a score for each sub-scale. The total score for the OLQ is the sum of the three subscale scores. Reverse scoring is required for 13 of the items.

Interpretation

The highest possible score is 203, including the three sub-scales, which gives a global indication of the respondent's sense of coherence. The sub-scales can also be interpreted separately. A low score on one sub-scale indicates that the trait is present only to a lesser extent, whereas a higher score is indicative of the presence of the trait to greater degree (Antonovsky, 1987). A person with a strong sense of coherence will have a significantly higher score on the three sub-scales.

Reliability and validity

Antonovsky (1987) reported high internal consistency and reliability by indicating reliability coefficients ranging from 0.84 and 0.93, and test-retest reliability coefficients ranging from 0.41 and 0.97 (Antonovsky, 1993). Strümpfer and Wissing (1998) confirmed the reliability and validity of the OLQ in various South African studies. In accordance with these findings, Coetzee and Rothmann (1999), Naudé and Rothmann (2000) and Pretoruis and Rothmann (2001) found alpha coefficients of 0.89, 0.88 and 0.93 respectively for the OLQ.

Motivation for choice

The OLQ was chosen due to the fact that it best supports the construct of sense of coherence. High levels of reliability and validity contribute to the motivation for the use of the OLQ as a measure of sense of coherence, as well as the fact that the questionnaire can be applied across cultural boundaries (Antonovsky, 1987).

4.2.3   Measurement of coping

In the measurement of coping, the Coping Orientations to the Problems Experienced (COPE) Questionnaire (Carver et al, 1989) is used. The development, description, administration and scoring, interpretation, reliability and validity, as well as the motivation for the use of the COPE Questionnaire are discussed.

Development

The COPE Questionnaire (Carver et al, 1989) was developed into a multidimensional coping inventory to assess the different coping strategies people use to respond to stress. The questionnaire went through several development stages and a number of theoretically important factors were identified. The final version of the COPE Questionnaire inventory has 13 scales with four items each.

Description

The COPE Questionnaire is a multi-dimensional self-report coping questionnaire that contains 53 items. The instrument is made up of 13 different sub-scales, each containing four items that measure 13 different coping styles. Nine of the coping styles were developed from theoretical arguments while four were identified by research as important aspects of coping. The sub-scales were categorised into three coping styles: problem-focused coping styles, emotional-focused coping styles and dysfunctional coping styles. The 14th sub-scale (alcohol and drug disengagement) was added later and is made up of only one item. The following sub-scales were distinguished:

Problem-focused coping styles:

Active coping

This involves the process of taking active steps to try to remove or avoid the stressor or to restructure its effects. Active coping includes initiating direct action, increasing one's efforts, and trying to execute a coping attempt in stepwise fashion.

Planning

This involves coming up with action strategies, thinking about what steps to take and how best to handle the problem. It can be defined as thinking about how to cope with a stressor.

Suppression of competing activities

This is about the suppression of competing activities or the suppression of competing channels of information. It involves putting other projects aside, trying to avoid becoming distracted by other events, even letting other things slide in order to deal with the stressor.

Restraint coping

This involves waiting until an appropriate opportunity presents itself to act, holding oneself back and not acting ahead of time. This is an active coping strategy; the person's behaviour is focused on dealing with the stressor effectively, but is also passive in terms of using self-control by not acting.

Seeking social support for instrumental reasons

Seeking social support involves seeking advice, assistance or information.

Emotional-focused coping styles:

Seeking social support for emotional reasons

Seeking social support involves looking for moral support, sympathy or understanding.

Positive reinterpretation and growth

This is an attempt to manage stress emotions rather than dealing with the stressor per se.

Acceptance

A person who accepts the reality of a stressful situation would seem to be a person who is engaged in an attempt to deal with the situation.

Turning to religion

Turning to religion might serve as a source of emotional support, as a mechanism for positive reinterpretation and growth or as a tactic of active coping with a stressor. It assesses, in a general way, the tendency to turn to religion in times of stress.

Denial

This is the refusal to believe that the stressor exists or trying to act as though the stressor is not real.

Dysfunctional coping styles:

Focus on and venting emotions

This involves focusing on whatever distress one is experiencing and venting the associated feelings.

Behavioural disengagement

This involves reducing one's effort to deal with the stressor and giving up attempts to attain those goals with which the stressor is interfering.

Mental disengagement

This occurs through a variety of activities that serve to distract the person from thinking about the behavioural dimension or goal with which the stressor is interfering. This involves activities like day dreaming and escaping through sleep.

Administration and scoring

There is no time restriction to the questionnaire and it takes approximately 15 minutes to complete. The COPE Questionnaire has a self-report format in which participants have to describe what they mostly do or think in stressful situations. A four-point

Likert scale is used to score the questionnaire, which ranges from 1 ("I usually don't do this at all"), to 4 ("I usually do this a lot") (Carver et al, 1989).

Interpretation

The marked scores for each sub-scale are added and divided by four. The scales with the highest scores indicate the coping styles used most frequently. The total score can be a minimum of 13.25 and a maximum of 53.

Reliability and validity

According to Carver et al (1989), the internal consistencies of the COPE Questionnaire scales all exceed 0.6, with the exception of the mental disengagement scale (0.45). Test-retest reliabilities showed reasonable stability and ranged from 0.42 to 0.89 for the different scales. Convergent and discriminant validity was also in line with expectations (Carver et al, 1989). Pienaar and Rothmann (2003) reported reliability coefficients of between 0.80 and 0.92. They also reported inter-item correlation coefficients of between 0.15 and 0.50, indicating the internal consistency of the factors of the COPE Questionnaire. Storm and Rothmann (2003) found inter-item correlation coefficients varying between 0.25 and 0.65, also indicating acceptable levels of internal consistency for the COPE Questionnaire.

Motivation for choice

It is evident from the literature review that the COPE Questionnaire is one of the most widely-accepted and commonly-used instruments for measuring coping styles. It consists of sound psychological constructs across cultural groups (Carver et al, 1989). The questionnaire measures a wide variety of coping styles. The aim is to establish what coping style a person generally prefers. Common, as well as less common, coping styles are measured with the question not being bound to a specific situation.

4.2.4   Biographical questionnaire

The biographical information (age, ethnicity, education, language, years working, number of children, years married, type of work, industry) of the working mothers was obtained using a self-report questionnaire developed by the researcher.

4.3   PROCEDURE

In this section, the procedure used in conducting the research and administering the various measuring instruments, is explained.

4.3.1   Presenting and motivating the study for approval

Approval was obtained by contacting relevant managers within identified companies and establishing their willingness to participate in the study. After establishing their willingness to participate, a letter was sent to the manager, indicating the details of the study. Upon approval, logistical arrangements were made in order to administer the measuring instruments on identified participants.

4.3.2   Administration of the measuring instruments

The various organisations were visited and the measuring instruments were administered on the scheduled times. At the beginning of each session the researcher explained the objectives of the research and its confidentiality to the participants and consequently asked them to complete a consent form. The participants were invited to complete the questionnaires as openly and honestly as possible without any fear that the individual results would be discussed with management.

The researcher stipulated that participation was voluntary. The researcher was present at all times to answer any questions.

4.4   STATISTICAL DATA-ANALYSIS

The statistical analysis was carried out with the help of the Statistica Version 6.

Descriptive statistics were used to analyse the data (sample of working mothers). Means, standard deviations, skewness and kurtosis are used to describe and compare results. The mean is used as a measure of central tendency. The standard deviation indicates the average distance of the individual score from the mean. The higher the standard deviation, the greater the distances are, on average, from the mean. Skewness gives an indication of the symmetry of the distribution. A skewed variable is a variable whose mean is not in the centre of the distribution. Kurtosis has to do with the peakedness of a distribution; a distribution is either too peaked or too flat (Huysamen, 1993).

Cronbach's coefficient alpha is determined to assess the internal consistency reliability of the measuring instruments that have different scoring and response scales. This index is indicative of the extent to which all the items in the questionnaire are measuring the same characteristics (Huysamen, 1993).

Inter-item correlation coefficients are used to determine whether the internal consistencies of the constructs are not too high, thereby affecting the validity.

The COPE Questionnaire is subjected to an exploratory factor analysis and internal consistency analysis. A principal component analysis with a varimax rotation was done on the items to determine the instrument's validity. The sample size of this study does not really permit the calculation of factor analysis, but because of the previous problems experienced with the factor structure of the COPE Questionnaire, it was decided to determine the factor structure for this specific sample. The use of this strategy was discussed and suggested in a personal communication with Pienaar (January 2006). Pienaar and Rothmann (2003) have extensively investigated the factor structure of the COPE Questionnaire in South African samples.

The product-moment correlation coefficient (r) is used to determine the relationship between variables. The relationship between variables can be either positive or

negative. A positive relationship exits when a decrease in the measurement of one variable leads to a decrease in the other variable; and a negative relationship exists when a decrease in the measurement of one variable leads to an increase in the other variable (Howell, 1995). The product-moment correlation coefficient varies between -1.00 to +1.00. The closer the value of a correlation coefficient (r) to -1.00 or +1.00, the more accurate the prediction that one variable is related to another (Howell, 1995).

According to Steyn (1999), there is an increasing need for researchers to interpret results according to effect sizes and practical significance rather than statistical significance. Statistical significant tests and p-values are used to determine if results are significant. Small p-values (< 0.05) are frequently used as sufficient evidence that results are of statistical significance. This is, however, not always a reliable method, as statistically significant results are often not practically important.

According to Cohen (1988), the following are cut-off points for the practical significance of the correlation coefficient between variables:

$r = 0.10$ (small effect)
$r = 0.30$ (medium effect)
$r = 0.50$ (large effect)

In this study, r-values larger than 0.30 (medium effect) are considered to be practically significant.

According to Cohen (1988), a correlation (r) can be understood by determining its square (r^2). A regression analysis is used to determine the proportion of the total variance of one variable that is explained by another variable (Moore, 1995). In the present study, a multiple regression analysis is conducted to determine the proportion of the total variance of coping that is explained by personality and sense of coherence.

4.5   CHAPTER SUMMARY

In this chapter the method used for the empirical study was explained. The selection and composition of the sample, the measuring instruments, data gathering and data processing, as well as the relevant statistical analysis, were discussed. Finally, research hypotheses were formulated in terms of this study.

The next chapter will focus on the results of the empirical study.

CHAPTER 5

RESULTS AND DISCUSSION

In this chapter the results of the empirical study are reported and discussed. The factor analysis regarding the COPE Questionnaire is discussed, after which the descriptive statistics and reliability coefficients of the measuring instruments are given. The mean, standard deviation (SD), skewness, kurtosis and alpha coefficients (α) are reported.

The relationships between personality dimensions/traits and coping styles; personality dimensions/traits and sense of coherence; and sense of coherence and coping styles are reported. Finally, a multiple regression analysis is carried out to determine if personality dimensions and sense of coherence can act as predictors of coping styles.

5.1   VALIDITY OF THE COPE QUESTIONNAIRE

The COPE Questionnaire in its current form raised some concerns with regards to its reliability and validity. Since the origin of the instrument a decade ago, a factor analysis of the items resulted in varied underlying structures. Apart from finding different numbers of factors, factor structures did not replicate consistently across studies either when Pienaar & Rothmann (2003) compared various studies in terms of their factor analyses on the COPE Questionnaire with that of Carver et al (1989).

Based on the above, Pienaar and Rothmann (2003) subjected the COPE Questionnaire to a confirmatory factor analysis and an internal consistency analysis. However, the current factor structures of the COPE Questionnaire could not be confirmed with confirmatory factor analysis, as many of the alpha coefficients were lower than the cut-off point of 0.70 (Nunnally & Bernstein,1994).

As a result of the above, Pienaar and Rothmann (2003) used exploratory factor analysis on the items of the COPE Questionnaire, which resulted in the identification of four factors: active coping, avoidance coping, seeking emotional support and turning to religion (Pienaar & Rothmann, 2003).

The same route was followed with regard to this research study, as concerns were raised in terms of the COPE Questionnaire's reliability and validity.

The 14 scales of the COPE were subjected to an internal consistency analyses. However, because many alpha coefficients were lower than the cut-off point of 0.70 (Nunnally & Bernstein, 1994) it was decided to proceed with exploratory factor analysis.

An exploratory principle component analysis was conducted on the 53 items of the COPE Questionnaire, which resulted in four factors, explaining 40% of the variance in the data. Next, a principal component analysis with a varimax rotation was conducted on the items. The results of the factor analysis on the COPE Questionnaire are shown in Table 5.1. Variables are ordered and grouped according to the size of the factor loading to facilitate interpretation. Zeros represent loads of under 0.4 (16% of variance).

Table 5.1: Factor loading for principal factor extraction and varimax rotation on COPE Questionnaire items

Item	F1	F2	F3	F4
I try to grow as a person as a result of the experience.	0.44	0.00	0.00	0.00
I force myself to wait for the right time to do something.	0.54	0.00	0.00	0.00
I take time to figure out what I am really feeling.	0.55	0.00	0.00	0.00
I get used to the idea that it has happened.	0.46	0.00	0.00	0.00
I think about how I might best handle the problem.	0.69	0.00	0.00	0.00
I delve through my feelings to gain a thorough understanding of them.	0.50	0.00	0.00	0.00
I try to see it in a different light, to make it seem more positive.	0.65	0.00	0.00	0.00
I make sure not to make matters worse by acting too soon.	0.57	0.00	0.00	0.00
I realise that my feelings are valid and important.	0.46	0.00	0.00	0.00
I try hard to prevent other things from interfering with my efforts at dealing with this.	0.66	0.00	0.00	0.00
I devise a plan of action.	0.47	0.00	0.00	0.00
I do what has to be done, one step at a time.	0.62	0.00	0.00	0.00
I acknowledge my emotions.	0.49	0.00	0.00	0.00

	F1	F2	F3	F4
I look for something good in what is happening.	0.52	0.00	0.00	0.00
I restrain myself from doing anything too quickly.	0.41	0.00	0.00	0.00
I try to come up with a strategy about what to do.	0.55	0.00	0.00	0.00
I learn something from the experience.	0.65	0.00	0.00	0.00
I concentrate on my efforts to do something about it.	0.61	0.00	0.00	0.00
I keep myself from getting distracted by other thoughts or activities.	0.44	0.00	0.00	0.00
I ask people who have had similar experiences what they did.	0.00	0.54	0.00	0.00
I talk to someone about how I feel.	0.00	0.80	0.00	0.00
I let my feelings out.	0.00	0.69	0.00	0.00
I try to get emotional support from friends or relatives	0.00	0.79	0.00	0.00
I try to get advice from someone about what to do.	0.00	0.67	0.00	0.00
I get upset and let my emotions out.	0.00	0.56	0.00	0.00
I get sympathy and understanding from someone.	0.00	0.72	0.00	0.00
I let my feelings come out freely.	0.00	0.78	0.00	0.00
I talk to someone who could do something concrete about the problem.	0.00	0.56	0.00	0.00
I take time to express my emotions.	0.00	0.58	0.00	0.00
I feel a lot of emotional distress and I find myself expressing those feelings a lot.	0.00	0.47	0.00	0.00
I talk to someone to find out more about the situation.	0.00	0.70	0.00	0.00
I allow myself to express my emotions.	0.00	0.77	0.00	0.00
I refuse to believe it has happened.	0.00	0.00	0.46	0.00
I drink alcohol or drink drugs, in order to think about it less.	0.00	0.00	0.43	0.00
I admit to myself that I can't deal with it, and quit trying.	0.00	0.00	0.64	0.00
I say to myself: "This isn't real".	0.00	0.00	0.67	0.00
I give up trying to get what I want.	0.00	0.00	0.66	0.00
I pretend that it hasn't really happened.	0.00	0.00	0.69	0.00
I act as though it hasn't even happened.	0.00	0.00	0.71	0.00
I hold off doing anything about it until the situation permits.	0.00	0.00	0.42	0.00
I put my trust in God.	0.00	0.00	0.00	0.73
I pray more than usual.	0.00	0.00	0.00	0.80
I try to find comfort in my religion.	0.00	0.00	0.00	0.79

Factor labels: F1: active coping, F2: emotional coping, F3: avoidance coping, F4: turning to religion

The four factors that were extracted accounted for 40% of the total variance in the data. A cut-off of 0.4 was used for the inclusion of an item in the interpretation of a factor. Ten of the 53 items did not load on the four factors and were consequently discarded.

The first factor was labelled *active coping*. Items loading on this factor relate to goal-directed behaviour in terms of handling a problem. The second factor was labelled *emotional coping* and encompassed behaviour relating to the venting of emotions/feelings and seeking social support. The third factor was labelled *avoidance coping* and involved items relating to denying or ignoring the problem. The fourth factor was labelled *turning to religion* and referred to praying and religious behaviour.

The items that failed to load on the four factors included putting aside other activities, taking additional action to try to get rid of the problem, sleeping more than usual, learning to live with it, turning to work or other substitute activities to take one's mind off things, taking direct action to get around the problem, accepting that this has happened and that it can't be changed, going to movies or watching TV, focusing on dealing with the problem or, if necessary, letting other things slide a little and reducing the amount of effort put into solving the problem. These items were removed from subsequent analysis.

It is evident that these results compare well with the study conducted by Pienaar and Rothmann (2003), which identified four similar factors: active coping, avoidance coping, seeking social support and turning to religion. Pienaar and Rothmann (2003) also indicated that 12 of the 53 items did not load on the identified factors and were consequently left out in further analysis. These items included, for example, holding off action until the situation permits, waiting for the right time to act, putting aside other activities, taking one's mind off things, sleeping more than usual and focusing on dealing with the problem. However, because of the limited sample size of the current study, the results of the factor analysis should be interpreted with caution.

The results of the alpha-coefficients and mean inter-item correlations of the four identified coping styles are shown in Table 5.2.

Table 5.2:   **Alpha-coefficients and mean inter-item correlations of the four identified coping styles**

Factor	Alpha	Inter-item correlation
F1 (active coping)	0.879	0.285
F2 (emotional coping)	0.898	0.415
F3 (avoidance coping)	0.772	0.297
F4 (turning to religion)	0.886	0.732

Factor 1 (active coping), 2 (emotional coping), 3 (avoidance coping) and 4 (turning to religion) have an alpha-coefficient ranging from 0.772 to 0.886, with factor 1 (active coping), 2 (emotional coping) and 3 (avoidance coping) having a mean inter-item correlation of between 0.285 and 0.415. These results are in line with the alpha-coefficient cut-off point of 0.70 (Nunnally & Bernstein, 1994), which is an indication of high levels of reliability. Factor 4 (turning to religion) was reported as having a mean inter-item correlation of 0.732, which is much higher than the accepted range of 0.15 to 0.50 (Clark & Watson, 1995).

Factor 4 (turning to religion) was consequently left out in the remainder of the statistical analysis, due to the fact that only three items loaded on the factor, resulting in a high mean inter-item correlation. Only factor 1 (active coping), factor 2 (emotional coping) and factor 3 (avoidance coping) were used in further statistical analysis.

5.2   DESCRIPTIVE STATISTICS AND RELIABILITY

The mean, standard deviation, skewness and kurtosis were determined for the different questionnaires and their sub-scales. Alpha-coefficients were also calculated for each measuring instrument to determine their internal consistency. The descriptive statistics and the internal consistency of the measuring instruments are shown in Table 5.3.

Table 5.3: Descriptive statistics and reliability in terms of personality, sense of coherence and coping for the total population (N=102)

Item	Mean	Standard deviation	Skewness	Kurtosis	Alpha
OPQ32n					
Persuasiveness	19.48	5.40	0.05	-0.68*	0.82
Controlling	21.89	4.58	-0.56*	-0.14	0.81
Outspoken	20.71	4.70	0.01	-0.39	0.73
Independent-minded	21.18	4.33	-0.12	-0.17	0.71
Outgoing	21.22	5.33	-0.12	-0.85*	0.83
Affiliative	21.79	5.94	-0.56*	-0.27	0.85
Socially confident	21.40	5.02	-0.27	-0.92*	0.85
Modest	19.08	4.50	0.17	-0.88*	0.81
Democratic	24.83	4.09	-0.93*	0.83*	0.67
Caring	26.80	4.86	-0.63*	0.35	0.78
Data-rational	22.14	4.84	-0.82*	0.38	0.81
Evaluative	23.86	3.88	-0.14	-0.39	0.63
Behavioural	25.56	4.77	-0.66*	0.83*	0.82
Conventional	20.39	4.73	-0.11	-0.63*	0.76
Conceptual	21.61	4.11	0.14	-0.45	0.66
Innovative	22.08	4.34	-0.26	-0.04	0.77
Variety-seeking	21.95	4.87	0.12	-0.82*	0.73
Adaptable	20.21	4.44	-0.18	-0.36	0.76
Forward-thinking	22.30	4.55	-0.35	-0.64*	0.79
Detail-conscious	26.05	4.84	-0.51*	0.17	0.75
Conscientious	26.46	3.16	-0.24	-0.22	0.60
Rule-following	23.82	5.07	-0.58*	-0.41	0.85
Relaxed	19.54	5.19	-0.09	-0.95*	0.86
Worrying	22.50	4.85	-0.43	-0.68*	0.87
Tough-minded	17.38	4.81	0.20	-0.59*	0.83
Optimistic	25.85	5.28	-0.26	-0.48	0.83
Trusting	18.98	5.08	-0.07	-0.48	0.76
Emotionally controlled	20.32	4.92	-0.11	-0.66*	0.83

Vigorous	28.01	4.22	-0.48	0.18	0.77
Competitive	15.92	4.52	1.03	1.09	0.83
Achieving	24.99	5.21	-0.42	0.10	0.78
Decisive	19.67	4.03	0.19	-0.48	0.77
OLQ					
Comprehensibility	44.41	10.90	-0.35	0.07	0.82
Manageability	48.46	9.20	-0.83*	1.31*	0.77
Meaningfulness	41.39	7.96	-1.02*	2.18*	0.78
Sense of coherence	134.26	23.35	-0.88*	2.14*	0.89
COPE QUESTIONNAIRE					
Active coping	57.10	8.78	0.05	-0.86*	0.88
Emotional coping	32.93	8.47	-0.08	-0.71*	0.90
Avoidance coping	13.43	4.12	1.25*	1.73*	0.77

* Significant level of skewness and kurtosis

The following conclusions with regards to personality, coping and sense of coherence can be made based on the results as expressed in Table 5.3:

Personality

Saville and Holdsworth (1999b) reported an average score for the 32 scales of between 15.49 and 25.65, with a standard deviation of between 3.71 and 5.73. The current study supports these findings as it has an average score of between 15.92 and 28.01 and a standard deviation of between 3.16 and 5.94.

With regard to skewness and kurtosis, the population seems to be relatively normally distributed, with a high level of kurtosis, indicating the peakedness of the distribution.

The reliability coefficient for the 32 scales ranges between 0.60 and 0.87 and it can therefore be described as an internal consistent measuring instrument for personality dimensions/traits. These findings support the findings of Saville and Holdsworth (1999b), who reported a reliability coefficient of between 0.63 and 0.87.

Sense of coherence

The total of the three sub-scales gives an indication of the sense of coherence of the population, ranging from 120 to 150. Wissing and Van Eeden (1997) found an average score of 136.52 with a standard deviation of 21.68, while Coetzee and Rothmann (1999) found an average score of 143.11 with a standard deviation of 21.42. The current study supports these findings by having an average score of 134.26 and a standard deviation of 23.35.

With regard to skewness and kurtosis, it seems that there is a small deviation from zero, indicating that the scores are relatively normally distributed. It also seems that all four dimensions (comprehensibility, manageability, meaningfulness and sense of coherence) are negatively skewed.

The reliability coefficient of the OLQ is 0.89. This finding is similar to the scores ranging from 0.82 and 0.95 reported by Antonovsky (1993), as well as a score of 0.89 reported by Coetzee and Rothmann (1999). The reliability of the three sub-scales (comprehensibility, manageability and meaningfulness) ranges from 0.77 to 0.82. These findings indicate that the sub-scales provide a reliable measurement of sense of coherence and the components thereof.

Coping

The average score for active coping is 57.10; emotional coping 32.93; and avoidance coping 13.43. The standard deviations range from 4.12 to 8.78. Pienaar and Rothmann (2003) reported an average score of 59.06 for active coping; 10.83 for seeking social support (emotional coping); and 27.25 for avoidance coping, with a standard deviation between 3.36 and 12.01.

The population seems to be normally distributed with emotional coping negatively skewed.

The reliability coefficients for active, emotional and avoidance coping are 0.88, 0.90 and 0.77 respectively and this coefficient can therefore be described as an internal

consistent measuring instrument for coping strategies. These findings support the findings of Pienaar and Rothmann (2003), who reported reliability coefficients of between 0.80 and 0.92.

5.3 THE RELATIONSHIP BETWEEN PERSONALITY DIMENSIONS AND COPING STYLES

In this section, product-moment correlation coefficients (r) are determined to give an indication of the strength of the linear relationship between variables. The correlations between personality dimensions and coping styles are given in Table 5.4.

Table 5.4: **The relationship between personality dimensions and coping styles**

	Active coping	Emotional coping	Avoidance coping
Persuasiveness	0.2963*	-0.0058	0.0993
Controlling	0.2680*	-0.0551	-0.1209
Outspoken	0.2219	0.1207	-0.1792
Independent-minded	0.1704	-0.2743*	0.0090
Outgoing	0.1716	0.3389*+	0.0323
Affiliative	-0.0254	0.3375*+	-0.0101
Socially confident	0.3078*+	0.0831	-0.1785
Modest	-0.0715	-0.2851*	0.0067
Democratic	0.1813	0.2393	-0.1922
Caring	0.1446	0.1225	-0.0502
Data-rational	0.1936	-0.2934*	-0.1258
Evaluative	0.2109	-0.2033	-0.2736*
Behavioural	0.2990*	0.1207	-0.1381
Conventional	0.0136	0.1617	-0.0423
Conceptual	0.1636	-0.0814	-0.0268
Innovative	0.1999	0.0419	-0.0717
Variety-seeking	0.0980	0.0076	-0.0073
Adaptable	-0.2376	0.0531	0.2739*
Forward-thinking	0.2082	-0.0031	-0.1324
Detail-conscious	0.3322*+	0.0131	-0.1627

Conscientious	0.1034	-0.1647	-0.3545*+
Rule-following	0.1207	-0.949	-0.0143
Relaxed	0.2321	0.0265	-0.0865
Worrying	-0.2222	-0.0278	0.0709
Tough-minded	0.1766	-0.1551	0.0666
Optimistic	0.1602	0.0715	-0.3092*+
Trusting	0.0656	0.1506	-0.3219*+
Emotionally controlled	0.0822	-0.4793*+	0.2489
Vigorous	0.0851	-0.0673	-0.1239
Competitive	0.2600*	-0.1150	0.1503
Achieving	0.2889*	-0.0220	-0.0571
Decisive	-0.0453	-0.0933	0.0369

* Statistically significant: $p \leq 0.01$

+ Practically significant: $r \geq 0.30$ (medium effect)

++ Practically significant: $r \geq 0.50$ (large effect)

According to Table 5.4, practically significant relationships of medium effect ($r \geq 0.30$) have been found between optimism and avoidance coping; trusting and avoidance coping; emotional control and emotional coping; outgoing and emotional coping; affiliative and emotional coping; socially confident and active coping; detail-conscious and active coping; and conscientious and avoidance coping.

A practically significant negative relationship (medium effect) exists between optimism, trusting, conscientious and avoidance coping. It can be deducted that pessimistic individuals, low on conscientiousness and on trust shown towards others, are more likely to display avoidant coping behaviour.

The outgoing and affiliative characteristics show a practically significant positive relationship (medium effect) with emotional coping. The deduction can be made that individuals who are talkative and lively, enjoy the company of others and like to be around people, will be more likely to cope by seeking emotional support and by venting their emotions.

A practically significant negative relationship (medium effect) exists between the characteristic of being emotionally controlled and emotional coping. It is evident that individuals who tend to conceal their emotions and keep their feelings to themselves will not be comfortable discussing their emotions with others and will not seek social support in this regard.

A practically significant positive relationship (medium effect) exists between the socially confident, detail conscious and active coping characteristics. The conclusion can be made that individuals who tend to be organised and systematic, while also being confident in formal situations and in the company of others, are more likely to address problems and situations in a goal-directed manner.

5.4 THE RELATIONSHIP BETWEEN PERSONALITY DIMENSIONS AND SENSE OF COHERENCE

Product-moment correlation coefficients (r) were used in this study to give an indication of the extent of the relationship between personality dimensions and sense of coherence. The correlations between these constructs are given in Table 5.5.

Table 5.5: **The relationship between personality dimensions and sense of coherence**

	Comprehensibility	Manageability	Meaningfulness	Sense of coherence
Persuasiveness	0.1105	0.1739	0.2258	0.1970
Controlling	0.2735*	0.2255	0.2421	0.2990*
Outspoken	0.2195	0.1315	0.2452	0.2378
Independent-minded	-0.0261	-0.0838	0.0620	-0.0240
Outgoing	0.1819	0.1568	0.1613	0.2017
Affiliative	0.1089	0.2083	0.1298	0.1771
Socially confident	0.3129*+	0.2568*	0.2857*	0.3446*+
Modest	-0.0591	-0.2286	-0.2006	-0.1860

Democratic	0.1868	0.2271	0.2020	0.2455
Caring	0.0962	0.1089	0.1242	0.1301
Data-rational	0.1386	0.1612	0.0999	0.1622
Evaluative	0.1642	0.0332	0.1574	0.1433
Behavioural	0.2173	0.1510	0.0988	0.1946
Conventional	0.0855	0.0488	-0.0727	0.0343
Conceptual	-0.0074	-0.0361	0.0690	0.0058
Innovative	0.1369	0.0172	0.1727	0.1295
Variety-seeking	-0.0093	0.1097	0.1113	0.0768
Adaptable	-0.2860*	-0.3683*+	-0.2702*	-0.3707*+
Forward-thinking	0.2360	0.1821	0.3512*+	0.3016*+
Detail- conscious	0.3924*+	0.2467	0.2593*	0.3687*+
Conscientious	0.3380*+	0.2739*	0.2471	0.3499*+
Rule- following	0.1040	0.0546	-0.0579	0.0503
Relaxed	0.3740*+	0.5434*++	0.3507*+	0.5082*++
Worrying	-0.2807*	-0.2753*	-0.2340	-0.3192*+
Tough-minded	0.2705*	0.1921	0.0894	0.2324
Optimistic	0.3601*+	0.3973*+	0.4536*+	0.4792*+
Trusting	0.4654*+	0.3664*+	0.2762*	0.4557*+
Emotionally controlled	-0.1887	-0.2213	-0.2758*	-0.2692*
Vigorous	0.0670	-0.0006	0.0423	0.0455
Competitive	-0.0548	0.0337	0.1170	0.0276
Achieving	0.1082	0.1635	0.3901*+	0.2478
Decisive	-0.0650	-0.0279	0.0270	-0.0321

* Statistically significant: $p \leq 0.01$

\+ Practically significant: $r \geq 0.30$ (medium effect)

\++ Practically significant: $r \geq 0.50$ (large effect)

According to Table 5.5, practically significant relationships of large effect ($r \geq 0.50$) have been found in terms of the following items: relaxed and manageability; and relaxed and sense of coherence. Practically significant relationships of medium effect

(*r* ≥0.30) have been found between relaxed and comprehensibility; relaxed and meaningfulness; worrying and sense of coherence; optimism and comprehensibility; optimism and manageability; optimism and meaningfulness; optimism and sense of coherence; trusting and comprehensibility; trusting and manageability; trusting and sense of coherence; achieving and meaningfulness; socially confident and comprehensibility; socially confident and sense of coherence; detail-conscious and comprehensibility; detail-conscious and sense of coherence; conscientious and comprehensibility; conscientiousness and sense of coherence; adaptable and manageability; adaptable and sense of coherence; forward-thinking and meaningfulness; and forward-thinking and sense of coherence.

A practically significant positive relationship (large effect) exists between relaxed, manageability and sense of coherence. It can be concluded that individuals who find it easy to relax and who are generally calm and untroubled are more likely to believe that enough resources are available to address a challenge and that things will generally work out well.

A practically significant positive relationship (medium effect) exits between optimism, comprehensibility, manageability, meaningfulness and sense of coherence. Individuals who tend to be positive about a situation generally tend to understand a challenge presented to them, they are motivated to make sense out of the challenge, believe that enough resources are available to address the challenge, and that things will work out for the best.

A practically significant positive relationship (medium effect) exists between trusting, comprehensibility, manageability and sense of coherence. Individuals who trust other people and view others as being reliable and honest are more likely to understand a challenge and believe that resources are available to address the challenge. They will generally believe that things will work out well.

A practically significant positive relationship (medium effect) exists between achieving and meaningfulness. Individuals who are ambitious, career-centred and who like to work towards demanding goals and targets are more likely to be motivated to reach their ambitious goals.

A practically significant positive relationship (medium effect) exists between being socially confident, comprehensible and sense of coherence. Individuals who are at ease in formal situations and are comfortable meeting new people are more likely to show an understanding towards stimuli around them and new challenges presented to them.

A practically significant positive relationship (medium effect) exists between being detail-conscious, comprehensibility and sense of coherence. Individuals who are preoccupied with detail and who are methodical, organised and systematic tend to show an understanding towards stimuli presented to them and also have a general attitude that things will work out well.

A practically significant positive relationship (medium effect) exists between conscientiousness, comprehensibility and sense of coherence. Individuals who are focused on getting things done tend to show a general understanding towards a challenge or situation presented to them and believe that things will generally work out well.

A practically significant positive relationship (medium effect) exists between forward thinking, meaningfulness and sense of coherence. Individuals adopting a long-term view and strategic perspective tend to understand different stimuli and challenges and have an attitude that things will work out for the best.

A practically significant negative relationship (medium effect) exists between worrying and sense of coherence. Worrying implies that a person generally feels nervous and worries that things will go wrong, whereas a sense of coherence implies that a person generally feels that things will go well and will work out for the best. This explanation therefore supports the negative relationship that exists between the two constructs.

A practically significant negative relationship (medium effect) exists between adaptable, manageability and sense of coherence. A person with a high tendency to be adaptable will most likely change his behaviour to suit different situations and will also adapt his approach to suit different people (inconsistent behaviour), implying that

the individual does not believe that resources are available to meet different demands and that all will work out for the best. This explanation supports the negative relationship that exists between the two constructs.

5.5   THE RELATIONSHIP BETWEEN SENSE OF COHERENCE AND COPING STYLES

In this section, product-moment correlation coefficients (r) are also determined to give an indication of the relationship between variables. The correlations between sense of coherence and coping styles are given in Table 5.6.

Table 5.6:   **The relationship between sense of coherence and coping styles**

	Active coping	Emotional coping	Avoidance coping
Comprehensibility	0.1812	0.0049	-0.3010*+
Manageability	0.3203+	0.0363	-0.2660*
Meaningfulness	0.4392*+	0.0922	-0.2891*
Sense of coherence	0.3605*+	0.0480	-0.3438*+

* Statistically significant: $p \leq 0.01$

\+ Practically significant: $r \geq 0.30$ (medium effect)

\++ Practically significant: $r \geq 0.50$ (large effect)

According to Table 5.6, practically significant relationships of medium effect ($r \geq 0.30$) have been found between comprehensibility and avoidance coping; manageability and active coping; meaningfulness and active coping; sense of coherence and active coping; and sense of coherence and avoidance coping.

A practically significant negative relationship exists between comprehensibility, sense of coherence and avoidance coping. It can be concluded that individuals with a strong sense of coherence understand the stimuli of their environments, believe that they can manage their environment and are motivated to do so, which implies that they would rather address situations in a goal-directed manner than to ignore the problem.

Manageability, meaningfulness and sense of coherence show a practically significant positive correlation with active coping strategies. It can be deduced that individuals will actively try to resolve problems if they are motivated, generally believe that things will work out well, and believe that there are enough resources to address the problem.

5.6 REGRESSION ANALYSIS REGARDING PERSONALITY DIMENSIONS AND COPING STYLES

A regression analysis of coping styles (dependent variable) and personality dimensions (independent variable) was conducted. The regression analysis for the relevant constructs is given in Table 5.7.

Table 5.7: **Regression analysis of personality dimensions and coping styles**

Model	Non-standardised coefficients		Standardised coefficients	T	p	F	R	R^2	ΔR^2
	B	**SE**	**Beta**						
Active coping						9.31	0.53	0.28	0.25
Constant	19.73	6.26		3.15	0.00				
Competitive	0.45	0.09	0.23	2.48	0.01*				
Persuasive	0.29	0.09	0.18	1.93	0.06				
Detail-conscious	0.48	0.09	0.27	3.00	0.00*				
Behavioural	0.47	0.09	0.26	2.78	0.00*				
Emotional coping						14.39	0.61	0.37	0.35
Constant	46.65	6.70		6.97	0.00				
Emotionally controlled	-0.70	0.08	-0.41	-4.80	0.00*				
Affiliative	0.24	0.09	0.17	1.88	0.06				
Democratic	0.28	0.08	0.14	1.62	0.11				
Data-rational	-0.52	0.08	-0.30	-3.72	0.00*				

	B	SE	Beta			F	R	R²	ΔR²
Avoidance coping						8.11	0.28	0.08	0.07
Constant	8.30	1.85		4.50	0.00				
Adaptable	0.25	0.10	0.27	2.85	0.01*				

* p < 0.01

According to Table 5.7, a total of 28% of the variance in active coping is explained by personality dimensions (competitive, detail-conscious and behavioural) ($F_{(4.97)} = 9.31$, $p \leq 0.00$). Thirty-seven percent of the variance in emotional coping is explained by personality traits (emotionally controlled and data-rational) ($F_{(4.97)} = 14.39$, $p \leq 0.00$). Furthermore, 8% of avoidance coping is explained by personality dimensions and the characteristic of being adaptable, ($F_{(1.10)} = 8.11$, $p \leq 0.01$).

5.7   REGRESSION ANALYSIS REGARDING COPING STYLES AND THE SUB-SCALES OF SENSE OF COHERENCE

A regression analysis of coping styles (dependant variable) and the sub-scales of sense of coherence (independent variables) were conducted. The regression analysis for the relevant constructs is given in Table 5.8.

Table 5.8:   **Regression analysis regarding coping styles and the sub-scales of sense of coherence**

Model	Non-standardised coefficients		Standardised coefficients	*T*	*p*	*F*	*R*	*R²*	*ΔR²*
	B	**SE**	**Beta**						
Active coping						23.90	0.44	0.19	0.18
Constant	37.03	4.17		8.86	0.00				
Meaningfulness	0.48	0.09	0.44	4.89	0.00*				
Emotional coping									
None									
Avoidance coping						7.13	0.35	0.13	0.11
Constant	21.52	2.23		9.67	0.00				
Comprehensibility	-0.08	0.10	-0.22	-2.19	0.03				
Meaningfulness	-0.11	0.10	-0.20	-2.00	0.05				

* p < 0.01

According to Table 5.8, a total of 19% of the variance in active coping is explained by meaningfulness ($F_{(1.10)}$ = 23.90%, $p < 0.00$). Emotional coping is not explained by any of the variables, although 13% of the variance in avoidance coping can be explained by comprehensibility and meaningfulness ($F_{(2.99)}$ = 7.13, $p < 0.00$), these dimensions are not significant predictors of avoidance coping.

5.8   REGRESSION ANALYSIS REGARDING COPING STYLES AND SENSE OF COHERENCE

A regression analysis of coping styles (dependant variable) and sense of coherence (independent variable) was conducted.The regression analysis for the relevant constructs is given in Table 5.9.

Table 5.9:   **Regression analysis regarding coping styles and sense of coherence**

Model	Non-standardised coefficients		Standardised coefficients	T	p	F	R	R^2	ΔR^2
	B	**SE**	**Beta**						
Active coping						14.93	0.36	0.13	0.12
Constant	38.89	4.78		8.14	0.00				
Sense of coherence	0.14	0.09	0.36	3.86	0.00*				
Emotional coping									
None									
Avoidance coping						13.40	0.34	0.12	0.11
Constant	21.57	2.26		9.56	0.00				
Sense of coherence	-0.06	0.09	-0.34	-3.66	0.00*				

$* p < 0.01$

According to Table 5.9, a total of 13% of the variance in active coping is explained by sense of coherence ($F_{(1.10)}$ = 14.93, $p < 0.00$). Emotional coping is not explained by any of the variables, whereas 12% of the variance in avoidance coping can be explained by sense of coherence ($F_{(1.10)}$ = 13.40, p < 0.00).

5.9 REGRESSION ANALYSIS REGARDING PERSONALITY DIMENSIONS, COPING STYLES AND SENSE OF COHERENCE

A regression analysis of personality dimensions (independent variable), coping styles (dependant variable) and sense of coherence (independent variable) was conducted. The regression analysis for the relevant constructs is given in Table 5.10.

Table 5.10: **Regression analysis regarding personality dimensions, coping styles and sense of coherence**

Model	Non-standardised coefficients		Standardised coefficients	T	p	F	R	R^2	ΔR^2
	B	**SE**	**Beta**						
Active coping						13.29	0.59	0.35	0.33
Constant	12.66	6.27		2.02	0.04				
Competitive	0.49	0.08	0.25	3.00	0.00*				
Detail-conscious	0.32	0.09	0.18	2.06	0.04				
Behavioural	0.51	0.08	0.27	3.25	0.00*				
Meaningfulness	0.37	0.09	0.33	3.96	0.00*				
Emotional coping						14.39	0.61	0.37	0.35
Constant	46.65	6.70		6.97	0.00				
Emotionally controlled	-0.70	0.09	-0.41	-4.80	0.00*				
Affiliative	0.24	0.09	0.17	1.88	0.06				
Democratic	0.28	0.08	0.14	1.62	0.11				
Data-rational	-0.52	0.08	-0.30	-3.72	0.00*				
Avoidance coping						5.90	0.39	0.15	0.13
Constant	16.91	3.41		4.96	0.00				
Adaptable	0.16	0.10	0.17	4.96	0.00*				
Comprehensibility	-0.07	0.10	-0.19	-1.80	0.07				
Meaningfulness	-0.09	0.10	-0.17	-1.67	0.10				

* p < 0.01

According to Table 5.10, a total of 35% of the variance in active coping can be explained by personality dimensions (competitive, behavioural) and meaningfulness $(F_{(4.97)} = 13.29, p < 0.00)$. Thirty-seven percent of emotional coping can be explained

by personality dimensions (emotionally controlled, data-rational) ($F_{(4.97)}$ = 14.39, $p <$ 0.00). A variance of 15% in avoidance coping can be explained by the personality dimension adaptable ($F_{(3.98)}$ = 5.90, p < 0.00).

5.10 DISCUSSION

This section will focus on the discussion of the results of the study.

The measuring instruments used to measure personality dimensions, sense of coherence and coping styles were found to be reliable and valid. The validity and reliability information was in line with what other researchers reported using the same instruments. The validity and reliability information of the instruments was also in line with reports of South African researchers.

According to the study it seems that a negative relationship exists between optimism, trusting, conscientiousness and avoidance coping. Outgoing and affiliative show a positive relationship with emotional coping, whereas emotionally controlled seems to be negatively correlated to emotional coping. A positive relationship exists between socially confident, detail-consciousness and active coping.

It was also found that relaxed, manageability and sense of coherence are positively correlated. Optimism, comprehensibility, manageability, meaningfulness and sense of coherence are positively correlated, as are trusting, comprehensibility, manageability and sense of coherence. A positive correlation also exists between achieving and meaningfulness, as well as between socially confident, comprehensible and sense of coherence. Detail-consciousness, comprehensibility and sense of coherence correlates positively, as well as forward-thinking, meaningfulness and sense of coherence. A negative relationship seems to exist between worrying and sense of coherence, as well as between adaptable, manageability and sense of coherence.

The abovementioned findings are confirmed by research done by Carver et al (1989), McCrae and Costa (1986), Fergusen (2001), Mlonzi and Strümpfer (1989); and Storm and Rothmann (2003). These researchers confirmed a positive relationship between active coping and optimism, extraversion, conscientiousness, emotional stability and

positive thinking, as well as a negative relationship between neuroticism and avoidance coping. Mlonzi and Strümpfer (1998) reported a positive relationship between sense of coherence and emotional stability, extraversion, independence, control and tough-poise; and a negative relationship between sense of coherence and anxiety and neuroticism. Ruiselová (2000) and Strümpfer and Wissing (1998) also reported a positive relationship between sense of coherence and emotional stability.

It is suggested that a negative relationship exists between comprehensibility, sense of coherence and avoidance coping, whereas manageability, meaningfulness and active coping strategies were found to be positively correlated.

From the findings it can be deduced that optimistic, positive, trusting and conscientious individuals generally have the ability to make sense out of the challenges presented to them and believe that things will work out well. They will strive to make sense of the situation and will actively look for ways of addressing the problem, believing that they have the necessary resources available.

Individuals who tend to be relaxed and calm generally believe that problems will work out well and that they have the necessary resources to address the problems. Outgoing, affiliative, socially confident and talkative individuals usually enjoy the company of others. They tend to show an understanding towards their environments and new challenges presented to them. These individuals seem to be comfortable with emotional coping styles.

Organised, systematic, strategic, ambitious, detail-orientated and confident individuals will usually focus on getting things done, believing in the best of the situation and the challenges presented to them. It seems that these individuals will most likely embark on goal-directed ways of addressing problems and coping with challenges.

It seems that individuals embarking on goal-directed, active ways of coping with challenges are most likely to have a tendency to understand their environment, are motivated to manage it, believe that they have enough resources to address the challenge and generally believe that things will work out well.

A person with a high tendency of being adaptable will most likely change his behaviour to suit different situations and will also adapt his approach to suit different people (inconsistent behaviour), implying that the individual does not believe that resources are available to meet different demands and that all will work out for the best.

With regard to the regression analysis, it was found that active coping can be explained by competitive, detail-consciousness and behavioural; emotional coping by emotionally controlled and data-rational; and avoidance coping by adaptable.

Active coping seems to be best explained by meaningfulness and sense of coherence, and avoidance coping by comprehensibility, meaningfulness and sense of coherence. It also seems that active coping can be explained by competitive, detail-conscious, behavioural and manageability; emotional coping by emotionally controlled, affiliative and democratic; and avoidance coping by adaptable, comprehensibility and manageability.

In terms of the above it seems that coping styles can be predicted by considering personality dimensions and sense of coherence. More specifically, it seems that competitiveness, behavioural and manageability needs to be considered when predicting active coping styles. With regard to emotional coping, it seems best to consider emotionally controlled and data-rational, whereas avoidance coping will be best predicted by adaptable, low comprehensibility and meaningfulness.

5.11   CHAPTER SUMMARY

In this chapter the results of the empirical study were reported and discussed. The reliability and validity of the COPE Questionnaire were discussed. Thereafter the descriptive statistics and reliability coefficients of the measuring instruments were reported. The relationship between personality dimensions, coping styles and sense of coherence were also reported. Lastly, a multiple regression analysis was conducted to determine the predictive value of personality dimensions and sense of coherence with regard to coping styles.

Herewith the first two objectives of the empirical study have been researched and consequently the fourth research question has been answered.

Conclusions made with regard to the literature findings and the empirical investigation will be discussed in the next chapter. Recommendations for the organisation, as well as for future research will be discussed.

CHAPTER 6

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

In this chapter conclusions about literature findings, as well as the results of the empirical study are made. The limitations of the present study are discussed and recommendations for the organisation and future research are presented.

6.1   CONCLUSIONS

In the following section conclusions are made with regard to the specific literature objectives, as well as the empirical findings of the present study.

6.1.1   Conclusions in terms of the specific literature objectives of the study

The following conclusions can be made with regard to the constructs of personality dimensions/traits, sense of coherence and coping styles:

Personality

Personality is conceptualised in the literature as the enduring characteristics and dispositions of a person that provide some degree of coherence across the various ways in which people behave. In this research study, personality is defined as a person's typical or preferred way of behaving, thinking or feeling.

It accepts that behaviour is determined by the current environment, emphasising stable characteristics, accounting for the differences between people in their way of relating to others, approaching tasks and responding to situations in general.

Personality dimensions are conceptualised as the building blocks of the concept of personality and can be defined as psychological structures that underlie relatively stable, enduring behavioural dispositions or characteristics of individuals. For this research study, personality dimensions are defined as any characteristic way of behaving, thinking and feeling.

Personality plays a key role in providing information on how individuals respond to various life situations.

Sense of coherence

Sense of coherence is conceptualised in the literature as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected. Sense of coherence consists of three core, interwoven constructs: comprehensibility, manageability and meaningfulness.

A person with a strong sense of coherence tends to understand challenges that are presented to them; believes that the resources are available to address the challenges; and that all will work out for the best.

Coping

Coping is conceptualised in the literature as constantly changing cognitive and behavioural efforts aimed at managing specific internal and/or external demands that are appraised as taxing or exceeding the resources of the person. It involves efforts to create conditions that permit a person to continue moving towards desired goals. In this research study, coping is defined as the different strategies people apply in the management of their circumstances.

Coping styles are conceptualised as coping patterns that seem to be habitual and can be categorised as active, emotional and avoidance coping styles. Coping plays a key role in people's emotional wellbeing. The greater the scope and variety in an individual's coping repertoire, the more protection coping gives that person.

6.1.2   Conclusions in terms of the specific empirical objectives of the study

The findings can be summarised as follows:

From the findings it can be deduced that optimistic, positive, trusting and conscientious working mothers generally have the ability to make sense out of the challenges presented to them and believe that things will work out well. They will strive to make sense of the situation and will actively look for ways of addressing the problem, believing they have the necessary resources available.

Working mothers that tend to be relaxed and calm generally believe that problems will work out well and that they have the necessary resources to address the problems.

Outgoing, affiliative, socially confident and talkative working mothers usually enjoy the company of others. They tend to show an understanding of their environments and new challenges presented to them. It seems that these individuals are comfortable with emotional coping styles.

Organised, systematic, strategic, ambitious, detail-orientated and confident working mothers will usually focus on getting things done, believing in the best of the situation and the challenges presented to them. It seems that these individuals will most likely embark on goal-directed ways of addressing problems and coping with challenges.

It seems that working mothers embarking on goal-directed, active ways of coping with challenges most likely have a tendency to understand their environment; are motivated to manage it; believe they have enough resources to address the challenge; and generally believe that things will work out well.

Working mothers with a high tendency for being adaptable will most likely change their behaviour to suit different situations and will also adapt their approaches to suit different people (inconsistent behaviour), implying that the individual does not believe resources are available to meet different demands.

It seems that coping styles of working mothers can be predicted from considering personality dimensions and sense of coherence. More specifically, it seems that competitiveness, detail-consciousness, behavioural and manageability need to be considered when predicting active coping styles. With regard to emotional coping, it seems best to consider emotionally controlled, affiliative and democratic coping styles, whereas avoidance coping will be best predicted by adaptable, low comprehensibility and manageability.

6.2   LIMITATIONS OF THE PRESENT STUDY

The following limitations have been identified:

- The study population only consisted of working mothers and is therefore not representative of other populations.

- The initial poor results of the COPE Questionnaire are indicative that the measuring instrument needs to undergo more research and that it must be adapted for South African circumstances.

- Research studies with regard to personality dimensions, sense of coherence and coping styles in general and within the South African context are limited. The lack of information limited the researcher in determining a theoretical relationship.

- Data was gathered through the use of self-report questionnaires for all the measured constructs.

6.3 RECOMMENDATIONS

Against the background of the abovementioned conclusions and limitations, recommendations will be made.

6.3.1 Recommendations for future research and industrial and organisational psychology practices

The following recommendations can be made for future research and industrial and organisational psychology practices:

- The relationship between personality dimensions, sense of coherence and coping styles should be investigated in a wider variety of study populations.

- The relationship between personality dimensions, sense of coherence and coping styles should be investigated with the inclusion of other salutogenic constructs.

6.3.2 Recommendations for the organisation

The following recommendations can be made for the organisation:

- Recruitment and selection practices can be designed to include measures of coping styles, personality dimension and sense of coherence in order to recruit working mothers who will most likely function effectively in the multiple roles, especially in the role of employee.

- Training and development initiatives focussing on coping styles, personality dimensions and sense of coherence can be designed on to assist working mothers to manage their multiple roles more effectively, which will ultimately allow them to function more effectively as employees.

- Career development practices can be developed around coping styles; personality dimensions and sense of coherence, in order to assist working mothers in defining realistic career goals and objectives.

6.4   CHAPTER SUMMARY

In this chapter conclusions were made with regards to the specific literature and empirical objectives of the study.   Thereafter the limitations of the study were mentioned and recommendations were made for future research, industrial and organisational practices, as well as for the organisation.

Herewith the last objective of the empirical study has been researched and consequently the last research question has been answered.

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