

**THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE, LOCUS
OF CONTROL, SELF-EFFICACY, SENSE OF COHERENCE
AND WORK ADJUSTMENT**

**by
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ABSTRACT

The military is a unique working environment that poses several challenges to soldiers. These include numerous ambiguities, psychological stressors, physical demands and resource challenges. In order for the military to be successful, it is important to employ individuals who will be able to thrive in this environment. The theory of work adjustment proposes correspondence between an individual and his or her work environment. The military needs individuals who will fit well into the organisation and enhance its capabilities.

The objective of this study was to explore the possible relationships between emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment within a military sample. The data was collected from a sample of 295 members of the South African National Defence Force preparing for an international deployment. The descriptive statistics included 76,6% males and 23,4% females with the majority of respondents (292) from the South African Army (99%), while the other respondents (3) were from the South African Military Health Service (1%).

Quantitative research techniques were employed to test the stated hypotheses. Emotional intelligence, locus of control, self-efficacy and sense of coherence were analysed as independent variables and work adjustment as the dependant variable. The findings supported the hypotheses, and relationships between emotional intelligence, locus of control, self-efficacy and sense of coherence were established. Contributions towards theory, literature, practice, labour, policies and military commanders are made. Recommendations for future research are also presented.

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LIST OF ACRONYMS AND ABBREVIATIONS

DOD	Department of Defence
EI	emotional intelligence
JWP	Joint Warfare Publication
LOC	locus of control
PTSD	post-traumatic stress disorder
RSA	Republic of South Africa
SA Army	South African Army
SANDF	South African National Defence Force
SE	self-efficacy
SOC	sense of coherence
SPSS	Statistical Program for the Social Sciences
UN	United Nations

CHAPTER 1

INTRODUCTION

1.1 GENERAL INTRODUCTION AND BACKGROUND TO THE STUDY

The importance of work has long since been recognised in the literature (Arnold & Randall, 2010; Hartung & Subich, 2011; Lofquist & Dawis, 1969). Within the field of work adjustment there are two prominent role players, namely the work environment and the person in the work environment. The work environment factors can include aspects such as the characteristics of the job itself, the organisational structures and rewards and remuneration. The person in the work environment is a make-up of various factors, including his or her personality traits, emotions, skills, knowledge, abilities and attributes. The congruence (or lack thereof) between the person and the environment refers to the aspect of work adjustment (Lofquist & Dawis, 1991).

Work adjustment is integrated into the theories of person-environment fit. Several theories of person-environment fit exist (Dawis & Lofquist, 1984; Edwards, 2008; Hershenson, 1996; Lofquist & Dawis, 1969). These theories are crucial in the research fields of organisational psychology, human resource management and organisational behaviour (Edwards, 2008). The utility of person-environment fit has been explored in relation to different person and environmental constructs. These include organisational rewards, organisational and individual values, employee needs and abilities, the demands of the post and the personalities of organisational members (Edwards, Cable, Williamson, Lambert & Shipp, 2006). Findings suggest that person-environment fit is correlated to employee commitment (Piasentin & Chapman, 2007), decisions regarding turnover (McCulloch & Turban, 2007; Ryan & Kristof-Brown, 2003), job satisfaction (Chen & Chiu, 2008; Von Kirchheim & Richardson, 2005), organisational performance and the physical and psychological well-being of employees (Edwards et al., 2006).

As will be elucidated upon later within this research, the utility of work adjustment produces several gains for the organisation (see Section 2.2.4). In order for organisations to access these benefits, it is important to understand the predictors of successful work adjustment. These predictors can be useful for both the individual and the organisation regarding career development and management. The individual can develop attributes contributing to work adjustment that is deemed necessary for the strategic success of the organisation. If research can be done to help identify the predictors of work adjustment, this can be achieved (Griffin & Hesketh, 2003).

The military work environment is a very unique work environment (Campbell & Nobel, 2009; Peterson, Park & Castro, 2011). The uniqueness of the military environment is graphically portrayed in Figure 2.6. Certain stressors in the military work environment are congruent with civilian organisations, including role-related stress, change stressors, physical demands, relationship difficulties, time and workload stressors and organisational culture stressors (Campbell & Nobel, 2009). In the military environment, though, several unique demands are made on military personnel. Some of these include working for modest remuneration, frequent relocations and separation from family (Peterson et al., 2011).

Military personnel often deploy¹ and engage in specific operations. These operations or missions can vary from peace and peace time activities, to peacekeeping and war. Peacetime is defined as “a period during which a state is not involved in a war or armed conflict” (Bowyer, 2004, p. 180). According to the South African National Defence Force’s Joint Warfare Publication on Peace Support Operations manual peace missions are defined as “multifunctional operations that impartially make use of diplomatic, civil and military means, in pursuit of an international, continental or regional mandate, to restore or maintain a self-sustaining, enduring peace” (Joint Warfare Publication, 2006, p. DEF-11). Therefore, peace missions include

¹ Deployment is defined as “the movement of troops to a war zone or area of operations” (Bowyer, 2004, p. 71).

preventative diplomacy, peacemaking, peacekeeping, peace enforcement and peace building activities.

Preventative diplomacy refers to the “primarily political/diplomatic process, mandated under Chapter VI of the UN Charter in order to prevent disputes from developing between parties, or existing disputes from escalating into open conflict, or to limit the escalation of conflict when it occurs” (Joint Warfare Publication, 2006, p. 1-2). Peacemaking is also a “primarily diplomatic process/activity, which is conducted with the aim of bringing hostile parties to a negotiated agreement through peaceful means” (Joint Warfare Publication, 2006, p. 1-3), for example a cease-fire agreement.

Peacekeeping operations describe the United Nations (UN) activities in the field. These activities involve military and civilian personnel “who are tasked with monitoring and assisting with the implementation of agreements reached between belligerent parties. It takes place with the consent of the conflicting parties and do not involve the use of force by the peacekeepers” (Joint Warfare Publication, 2006, p. 1-3). Peace enforcement describes activities by the UN where “the [United Nations] Security Council deems it necessary to use armed force to maintain or restore international peace and security in situations where the peace is threatened, where a breach of the peace occurs, or where there is an act of aggression” (Joint Warfare Publication, 2006, p. 1-3). Peace building activities can occur at any stage during the conflict cycle, but are usually conducted after conflict has ceased. Activities include “identification and support of measures and structures that will promote peace and build trust, and the facilitation of interaction among former enemies in order to prevent a relapse into conflict” (Joint Warfare Publication, 2006, p. 1-3). Peace building is primarily a diplomatic or developmental process, and does not constitute a military operation in the true sense of the word (Joint Warfare Publication, 2006).

Peace support operations are defined as “the collective term given to the military activities conducted within a peace mission” (Joint Warfare Publication, 2006, p. DEF-12). These operations may include conflict

prevention, peacemaking, peace enforcement, peacekeeping, peace building and/or humanitarian operations (Joint Warfare Publication, 2006). The concept of peace support operations is schematically displayed in Figure 1.1.

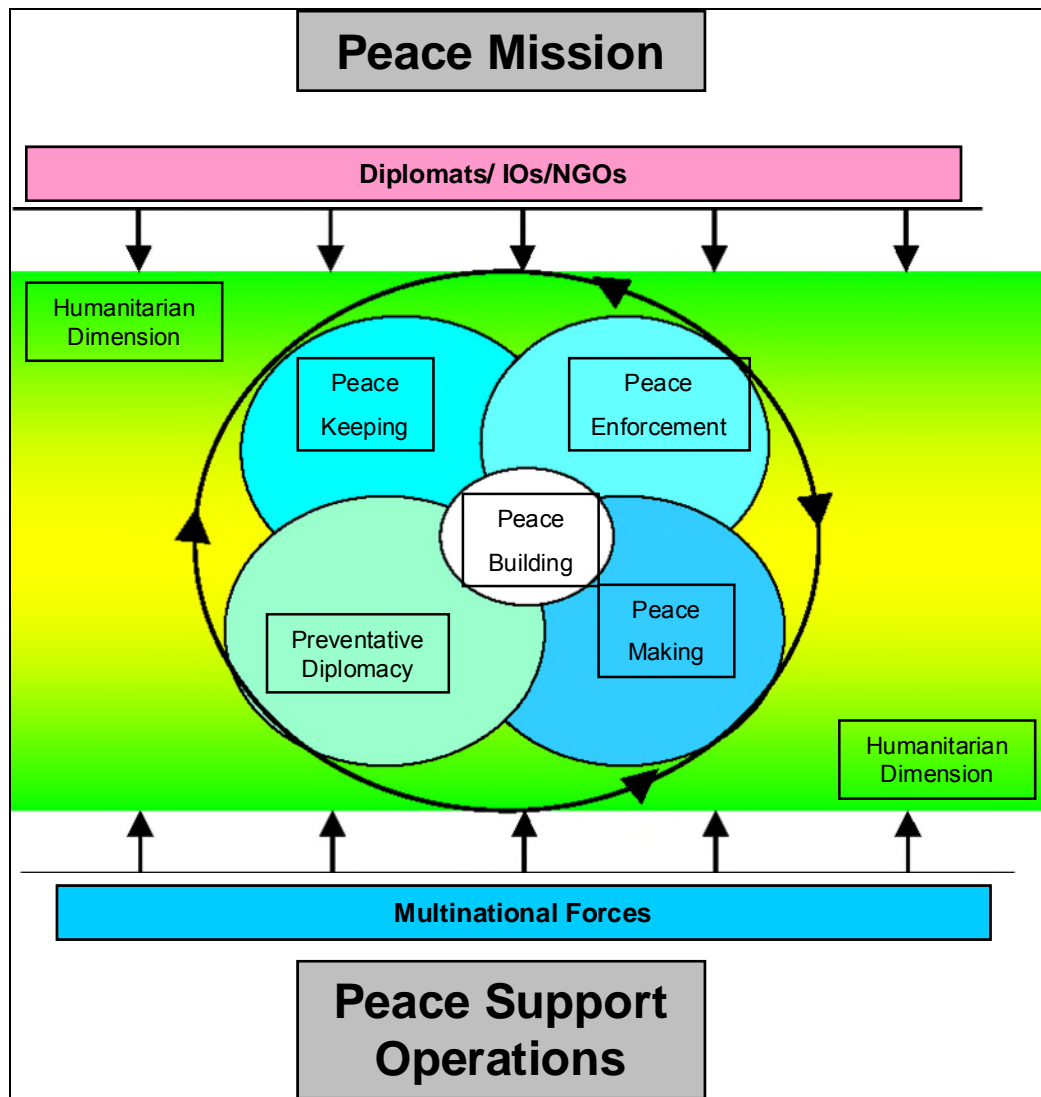


Figure 1.1 Peace missions (Joint Warfare Publication, 2006)

War is defined as “an armed conflict between nations” (Bowyer, 2004, p. 259). Armed conflict can be described as “a situation in which violence or military force is threatened or used. Generally it is a contest between two opposing sides, each seeking to impose its will on the other; however intra-state conflict may involve several factions” (Joint Warfare Publication, 2006, p. DEF-1).

From the above it is clear that the soldier functioning in this environment very often has to deal with complexities. These complexities (see detailed literature review in Chapter 2) include, but are not limited to, engagement ambiguity, mission ambiguity in a complex operating environment, leadership climate challenges, role ambiguity, situational and cultural ambiguity and combat stress whilst on deployment (Campbell & Nobel, 2009). Within the military context engagement is defined as “the exchange of fire between two opposing forces” (Bowyer, 2004, p. 86), and soldiers can experience ambiguity regarding the rules of engagement and the permissible use of force in differing situations.

Analysing the demands and stressors on military personnel, it becomes apparent that the military work environment does indeed differ from civilian organisations. Many of these stressors reflect the person-environment fit theory (Campbell & Nobel, 2009). Soldiers thus need to be multi-skilled and often adjust within a very brief period of time to all these stressors and demands provided by the military environment in order to be successful (Killion, Bury, Pontbriand & Belanich, 2009).

According to Lofquist and Dawis (1991), the congruence or degree of fit between the person and the environment can be determined through analysis of personality characteristics. For the purpose of this research the person variables of emotional intelligence, locus of control, self-efficacy and sense of coherence have been analysed in terms of their relationship to work adjustment (see Section 2.4). This will be discussed in detail in Chapter 2 (Section 2.4).

Emotional intelligence is defined as “the ability to monitor one’s own and others’ feelings, to discriminate among them, and to use this information to guide one’s thinking and action” (Salovey & Mayer, 1990, p. 189). Locus of control is defined as “the ways in which individuals attribute responsibility for events to factors within themselves and within their control or to factors outside their control” (Pfeiffer, 2003, p. 32). Self-efficacy is defined as “the conviction that one can successfully execute the behaviour required to

produce the outcomes” (Bandura, 1977, p. 193). Sense of coherence is defined as “a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one’s internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement” (Antonovsky, 1993, p. 725). These three components are called comprehensibility, manageability and meaningfulness. All these personality constructs have been linked to work adjustment (see Section 2.4) and its utility in the work environment.

Military personnel on deployments and international assignments can be regarded as the civilian equivalent of expatriates, but with the added stressors of the military work environment. A civilian expatriate can be defined as “a person who lives outside their native country” (Oxford, 2002, p. 405). Expatriates conduct assignments such as “facilitating the operation of foreign subsidiaries, establishing new international markets, spreading and sustaining corporate culture and transferring technology, knowledge and skills” (Huang, Chi & Lawler, 2005, p. 1656). This definition is broadened to an expatriate being “a voluntary, temporary migrant who resides abroad for a particular purpose and ultimately goes back to his or her home country” (Huang et al., 2005, p. 1659).

Expatriates are thus regarded as members of an organisation that has been awarded an international assignment. They will represent their organisation in a foreign country for a specific time period, with the intent to return to their own country once the assignment is completed. Some expatriates will take their family with them to their host country while others will go on their own and leave their family behind. Research on expatriates has concluded that the more expatriates perceived their work role conflict, ambiguity and overload, the poorer their overseas adjustment levels (Lii & Wong, 2008). In the South African military though, all deployments are not conducted on a voluntary basis. Often soldiers are ordered to deploy and they cannot refuse this order. It is regarded as part of their career development.

Thus, drawing from the research of the civilian expatriates' experiences, it is proposed that military personnel will be faced with similar challenges as expatriates during their work adjustment, with the added uniqueness of the military work environment. For the purpose of this research a military member on deployment is referred to as a member who deploys, whether voluntarily or not, within or outside the borders of the RSA², thus being away from home, for a temporary period with the aim to accomplish a mission, and thereafter return to his or her home unit³.

1.2 MOTIVATION FOR THE RESEARCH

In the context of the military environment the recruitment, selection, placement, career development and management of soldiers (military personnel) poses a fairly unique challenge for human resource managers and industrial psychologists. In a review of articles published by military psychologists in the United States, Freedman (2009) found that specialist psychological services are needed within the military environment. These services should be applied in the attraction, selection, recruitment, training, development, and deployment of employees. In support of this, Campbell, Moriarty and Heffner (2004) suggested that specialist psychological services can also be applied for promotional purposes.

It is thus necessary to analyse the antecedents and consequences of expatriates' levels of work adjustment, because one of the prominent reasons for expatriates to return prematurely from an assignment is adjustment difficulties (Breiden, Mohr & Mirza, 2006; Takeuchi, Tesluk, Yun & Lepak, 2005). Other reasons identified for premature termination of the assignment include poor expatriate selection by organisations, environmental challenges and the dissatisfaction of the expatriate's spouse or family with the assignment (Jenkins & Mockaitis, 2010).

² Republic of South Africa

³ Unit where member is permanently staffed

In the South African National Defence Force (SANDF), members repatriated early from deployments can be divided into three broad categories, namely legal reasons, psychological reasons and social work reasons (Visagie, 2013). In the legal category issues with deployed soldiers involve disciplinary problems, for example poor behaviour or absence without leave. In the psychological category issues with deployed soldiers can include diagnosis of psychosis (for example schizophrenia), homicidality (posing a threat to other members on deployment), aggressiveness, substance abuse and suicidal behaviour. In the social work category issues with deployed soldiers can include death in the family and familial adjustment problems (Visagie, 2013).

There still remains a research gap of theory-based analyses of antecedents and consequences of expatriates' levels of work adjustment (Breiden et al., 2006). This notion is narrowed down by Huang et al., (2005, p. 1668) by stating that "further studies are needed for better clarification and identification of specific personality traits as antecedents of expatriate success". This research gap in the antecedents of work adjustment urged the researcher to investigate the relevance of personality traits as antecedents of successful adjustment to deployment situations within the South African military environment. This guides one toward the research problem to follow.

1.3 RESEARCH PROBLEM

When looking at the theory of person-environment fit, the author concluded that there is a lack of published research in the South African military context. Two methods can be employed to help address this research gap. The first approach is analysing all variables that could influence person-environment fit within the military context. The second approach is to focus on certain aspects of the individual and the environment identified in the literature that influence person-environment fit within the military context. The research for this study followed the second approach to address the research gap and thus focus on certain aspects of the individual within the work environment within the military context.

Personality is regarded to be relatively stable over time and proximal to behaviours, and certain traits can be easier to observe than others (Ryan & Kristof-Brown, 2003). Every person has certain traits, motives, emotions and cognitions that define their personality (Mayer, 2006). Personality in the workplace has also been linked to career success through its influence on person-environment fit (Lau & Shaffer, 1999). The use of compound personality variables⁴ for prediction purposes in the workplace is an emerging facet within personality research (Hough, 2003). Personality traits could be used for selection purposes when selecting employees (Johnson, Kristof-Brown, Van Vianen, De Pater & Klein, 2003). It is believed that some people are born with some inherent traits while other traits can be developed. The role of personality variables is becoming more prominent in person-environment fit research within the workplace (Hough, 2003). Individuals will adjust more readily to their work if there is a fit with their personality types relevant to their specific careers (Carless, 2005).

The question thus arises as to the relevance of this theory on today's South African military environment. Can certain personality traits influence the adjustment of soldiers to the military environment? If the answer is yes, for practicality purposes the number of personality traits or constructs investigated in this research as possible antecedents of work adjustment has to be limited. The purpose of this research is not to provide an all inclusive investigation into all antecedents of work adjustment, but to identify certain traits or constructs through a literature review that can act as antecedents. This research acts as a starting point to address the research gap, and will hopefully illicit future research on these and other possible antecedents.

Emotional intelligence, locus of control, self-efficacy and sense of coherence are personality variables that have been linked to work adjustment through the literature (Antonovsky, 1993; Bar-On, Handley & Fund, 2006; Ferry, Fouad & Smith, 2000; Spector, 1982). Self-efficacy is an older construct from the 1970s that is still researched within current studies. In one of these

⁴ A combination of basic personality traits that do not necessarily co-vary

studies the relationship between self-efficacy and work adjustment has been established (Von Kirchheim & Richardson, 2005). The construct of locus of control has also been researched in terms of its relation to person-environment fit (Dawis & Lofquist, 1976; Feij, Van Der Velde, Taris & Taris, 1999). Sense of coherence has been found to be a moderator in its relationship with work adjustment (Strauser & Lustig, 2003). Emotional intelligence is a more recent construct and it is believed that individuals can develop this intelligence over time (Mayer, Salovey & Caruso, 2000). A detailed discussion of these constructs will follow in Chapter 2 (Section 2.4).

For this research only the constructs of emotional intelligence, self-efficacy, locus of control and sense of coherence (as part of the person) were analysed to determine whether there is relationship between these constructs as antecedents to work adjustment within a South African military sample. If the results support the hypotheses, then it could be possible to develop interventions for the SANDF that will facilitate the adjustment of members within the military environment and enhance the deployment capability and force preparedness of the SANDF. The results can also be used to predict whether individuals will be able to adjust to the military environment or not, influencing selection and placement staffing decisions by career managers. Results can also be utilised for change management activities within the SANDF.

1.4 RESEARCH OBJECTIVES

1.4.1 Main objective

The main objective of this study was to conduct research and thereafter empirically evaluate the relationships between emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment (see literature review) among members of the SANDF. An empirical research methodology was utilised to determine the existence of possible relationships among the identified variables on work adjustment. For the purpose of this study, the independent variables of emotional intelligence, locus of control, self-efficacy

and sense of coherence were empirically tested. The dependent variable was work adjustment.

1.4.2 Theoretical objective

The theoretical objective of this study was to conduct an overview of the current literature on the field of study. The existence of possible relationships between the constructs of emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment was examined (see detailed literature review in Chapter 2). The model on work adjustment within the military environment (see Figure 2.8) was systematically developed for the purpose of this study. After the empirical findings (see Chapter 4), the limitations, practical applications and recommendations for future research will be presented.

1.4.3 Empirical objective

The empirical objective of this study was to employ exploratory research methodologies in order to examine the relationships between emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment. The empirical aim was to statistically present the relationships between the independent and dependent variables (see Section 4.3).

1.5 CONTRIBUTION OF RESEARCH

Training and development in the South African military environment is regarded as a force preparation function. The cost of force preparation has become exorbitantly high, while the budget for these activities is continuously shrinking due to a change in budgeting priorities (Nobanda, 2012). Annually the number of members professionally developed at senior DOD⁵ training institutions (including the SANDF Defence College, SANDF War College and Warrant Officer's Academy) is 164, while 4883 members within the SANDF

⁵ Department of Defence

are trained within the Military Skills Development System. Other training institutions include the various formations that conduct force preparation training. In terms of expenditure, around R110 million is spent annually on force preparation and training (Department of Defence, 2010).

Tucker and Gunther (2009) observed that an evaluation of officer training for the United States Army established that “training and leader development programmes do not develop self-aware and adaptive leaders” (p. 316). The question arises as to whether this developmental gap is also applicable to the South African military environment.

The escalating monetary investment by the military into personnel training is a forerunner for the continuous investigating for better forecasters of individuals who will experience successful military training (Hartmann, Sunde, Kristensen & Martinussen, 2003). Cost benefits can be incurred if trainers include an aspect of adjustment into training programmes (Tucker & Gunther, 2009). Other factors contributing to this research are the human suffering experienced when individuals fail to complete training as well as the necessity to recruit competent and suitable individuals into the organisation (Hartmann et al., 2003; Martin, 2006). The overall cost-benefit to the organisation is considerable when only a few short assessments of applicants are conducted as a mass screening strategy (Irvin, Wulf, Schambach, Kutschke & Walker, 2004). Information can also be used to facilitate change management within the military organisation (Gelles, Brant & Dorsey, 2009). It is thus crucial that researchers identify specific constructs that can predict and assist an individual’s level of work adjustment (Strauser & Lustig, 2003).

An overview of the literature on expatriates (Huang et al., 2005; Lee, 2005; Takeuchi et al., 2005) that return early from their international assignments indicates that they incur a considerable cost to their organisation. In the United States of America (USA) it was determined that the early repatriation of an employee can cost the organisation anything between \$250 000 and \$1.25 million (Takeuchi et al., 2005). The unsuccessful expatriate can also suffer from poor self-esteem, low self-confidence, poor reputation, lack of

motivation and unwillingness to support other expatriates (Takeuchi et al., 2005). Therefore, it can be postulated that attrition and other types of unsuccessful training performance are costly for the military organisation as well. Important savings in human resources and training time might be achieved by developing more efficient selection programmes (Hartmann et al., 2003). In the SANDF members returning from deployment prematurely is referred to as expatriation. The monetary value is not necessarily determined for expatriation from a South African mission, because the individual costs for members within the operation are not established. But inferring from expenses to return to the country, the mobilisation of the replacement member, the movement of that member to the post in the other country and all the travelling, subsistence, accommodation, meals and even relocation costs, will result in the SANDF definitely bearing the brunt financially when members return prematurely from deployments.

This research attempted to identify some antecedents of successful adjustment in order to suggest training or developmental interventions to the SANDF. As part of this the research attempted to establish whether emotional intelligence, locus of control, self-efficacy and sense of coherence as part of personality traits can be used as antecedents for successful adjustment of military personnel within the South African environment. If the SANDF can appoint military personnel with the correct profiles into deployment positions, this can decrease the costs of early termination of deployment and re-staffing of the vacant positions. Training and development interventions can be designed to ensure that deployment personnel fit the prescribed profiles. Specifically, this research has attempted to add to the existing body of research by investigating the constructs of self-efficacy, locus of control, emotional intelligence and sense of coherence and its relationship with work adjustment, with specific reference to person-environment fit theory.

1.6 CHAPTER OUTLINE

This section outlines the content of the chapters for this research. The research is presented in five chapters. The first chapter introduces the reader

to the research problem. The second chapter presents a detailed literature review covering the constructs involved. The third chapter is the research methodology and in the fourth chapter the empirical findings are revealed. The final chapter concludes with a discussion regarding the findings.

Chapter 1 outlines the introduction and background to the study, the motivation and objectives for this research. The contribution of this research is also discussed.

Chapter 2 provides a theoretical framework that provides the necessity for the empirical evaluation of work adjustment within the South African military context. A range of outcomes are achieved through the literature review. The literature review chapter discusses the concepts of adjustment and person-environment fit. It differentiates between adjustment, adaptation and adjustment disorders. The utility of person-environment fit within the work environment is also be elucidated upon. Thereafter the personality traits of emotional intelligence, locus of control, self-efficacy and sense of coherence are conversed. A graphical portrayal of the conceptual framework for this research is provided.

Chapter 3 elaborates on the research methodology employed for this study. It explains the research design utilised in this process. The research variables are clarified as well as the sampling design employed. The various measuring instruments are identified and the psychometric properties involved are discussed. The reliability and validity involved in the research are articulated. The research process that was followed is explained.

Chapter 4 presents the findings of the statistical analyses. The descriptive statistics are given. Thereafter the internal reliability analysis is explained. The inferential statistics are covered in detail with a conclusion of the predictors of work adjustment in empirical evidence.

Chapter 5 discusses the results of the empirical findings of Chapter 4. The contribution of the study is discussed and recommendations for practice are made.

Chapter 6 concludes the study with a summary of the research conducted. The limitations to the study are discussed and recommendations are made for future research.

1.7 CONCLUSION

This chapter has introduced the background and motivation for this research. The definition of the research problem was introduced. The main, theoretical and empirical objectives were explained. The proposed contribution of the research was presented. Thereafter the chapter outline for the research was demarcated.

The next chapter is a detailed discussion regarding work adjustment, the unique challenges of the military work environment, emotional intelligence, self-efficacy, locus of control and sense of coherence. The chapter provides a conceptual framework for this research through the development of a model for work adjustment within the military work environment.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter the literature review is presented. According to Mouton (2001) a literature review is important to ensure the discovery of the current theories and identifying the acknowledged empirical findings in the field of study. The purpose of this research is to act as a starting point to address the research gap between the antecedents of work adjustment within the military environment. As will be eluded upon later in this chapter (Section 2.4), this research has explored the possible existence of relationships between certain personality aspects and work adjustment within the military work environment. Therefore emotional intelligence (see Section 2.4.1), locus of control (see Section 2.4.2), self-efficacy (see Section 2.4.3) and sense of coherence (see Section 2.4.4) as personality variables were investigated to determine possible relationships with work adjustment (see Section 1.3). The main objective of this study was to conduct research and thereafter empirically evaluate the relationships between emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment (see Section 1.4.1) among members of the SANDF.

The literature review in this chapter is presented in three sections. The first section focuses on the concept of adjustment. Within adjustment, the distinction is made between adjustment, adaptation and adjustment disorders. The theory of person-environment fit and the theory of work adjustment are also be discussed. The section will conclude with the utility of the person-environment fit theory within the work environment and the possible benefits to organisations.

The second section emphasises the unique challenges of the military as a work environment, distinguishing it from civilian organisations. The third section elaborates on the person aspect of the theory of person-environment

fit. In this section the following concepts are addressed: emotional intelligence, locus of control, self-efficacy and sense of coherence.

2.2 ADJUSTMENT

Adjustment within the work context can be referred to as “the correspondence between an individual and his environment” (Lofquist & Dawis, 1969, p. 45). It also refers to the individual’s “psychological comfort with various aspects of work” (Takeuchi et al., 2005, p. 86). It is important to have a closer look at some of the theories of work adjustment in the literature and evaluate whether these theories can be successfully applied within the military environment. This section of the literature review elaborates on the various components of work adjustment. The section commences with the distinction between adjustment, adaptation and adjustment disorders to provide the reader with a frame of reference for the discussion of adjustment in the workplace to follow (see Section 2.2.1). The theory of person-environment fit elaborates on the concept of the importance of fit or correspondence between the person and the work environment (see Section 2.2.2). The origins of the concept of work adjustment will follow (see Section 2.2.3). The section will conclude with the application and utility of person-environment fit within the workplace and how organisations can benefit from applying this theory (see Section 2.2.4).

2.2.1 Distinction between adaptation, adjustment and adjustment disorders

The aim of this section is to present the reader with an overview of the distinction between the concepts of adjustment, adaptation and adjustment disorders. The objective of this is two-fold. The first objective is to clarify the concept of adjustment for the purpose of this research, and the second objective is to indicate the continuum on which individual adjustment occurs.

To define adjustment and maladjustment is important, but quite difficult. It is difficult to determine what normal behaviour is and what abnormal behaviour is. Abnormal behaviour has been described as “patterns of emotion, thought

and action considered pathological (diseased or disordered) due to personal distress” (Huffman, 2007, p. g1). As the different theories of understanding explain, scientists and clinicians view normal and abnormal behaviour differently according to their specific school of thought. The behaviour perceived as ideal is constantly changing, for example, many German people regarded Adolf Hitler as a model of ideal behaviour for a relatively long time. This is certainly not the case today. Recently Hitler has been found to have possessed four personality disorders, including sadistic, antisocial, paranoid and narcissistic personality disorders (Coolidge & Segal, 2007). Therefore in the dynamic field of psychology, what is viewed as normal and abnormal behaviour is defined in terms of the current philosophies and point of views.

Adaptation can be defined as “a change or the process of change by which an organism or species becomes better suited to its environment” (Oxford, 2002, p. 12). This process can also be described as sensory adaptation (Huffman, 2007). According to the Dictionary of Psychology, adaptation is described as having a biological and physiological meaning “a temporary reduction in the responsiveness of a sensory receptor” (Colman, 2009, p. 11). It can therefore be described as the biological process of when an individual’s organs are exposed to intense stimulation; it will adapt itself to become less sensitive, while the absence of stimuli will cause its sensitivity to return to normal. An example is when a person moves from a dark interior into the sunlight, the eyes will take a moment to adapt to the bright light.

Often in the psychology literature the terms adaptation and adjustment are referred to in the same context. For the purpose of this research the term adjustment will be referred to instead of adaptation in order to refer to the psychological process of an individual defined as “the degree of a person’s psychological comfort with various aspects of a new setting” (Johnson et al, 2003, p. 280).

A generic definition for adjustment is “adapting or becoming used to a new situation” (Oxford, 2002, p. 12). Adjustment can also be categorised into general and work adjustment. General adjustment refers to “an individual’s

psychological comfort, familiarity, and ease regarding features of the general, non-work environment, such as food, housing, climate and living conditions” (Takeuchi et al., 2005, p. 86). Adaptive performance can be defined as “the proficiency with which a person alters his or her behaviour to meet the demands of the environment, an event, or a new situation (Johnson, 2003, p. 91)”.

When adjustment takes place in the work environment, it is referred to as work adjustment. The theory of work adjustment will be explicated later on (see Section 2.2.3), but here a brief description follows here to introduce the reader to the concept. Work adjustment refers to “an individual’s psychological comfort with various aspects of work, such as supervisory and job responsibilities” (Takeuchi et al., 2005, p. 86). Adjustment also refers to a “process through which an expatriate comes to feel comfortable with a new environment and harmonizes with it” (Huang et al., 2005, p. 1659).

Adjustment can also be defined as “the degree of a person’s psychological comfort with various aspects of a new setting” (Johnson et al, 2003, p. 280). The theory of work adjustment indicates that every individual will seek to achieve and maintain harmony with his work environment (Dawis, 1973). This is eluded upon in the definition of adjustment as “adaptation, especially behavioural adaptation to a particular environment or set of circumstances” (Colman, 2009, p. 13). Work adjustment is defined as “the continuous and dynamic process by which the individual seeks to achieve and maintain correspondence with his or her work environment” (Dawis & Lofquist, 1976, p. 55).

Although the scope of this research was not of a clinical psychology nature, it is important to briefly mention adjustment disorders within the military environment. Adjustment has its roots in abnormal psychology, due to the field of adjustment disorders as classified by the Diagnostic and Statistical Manual of Mental Disorders (Wise, 1988). An individual who does not adjust to his work environment over extended periods of time can develop adjustment disorders, but for the purposes of this research it is only in

extreme or severe cases. The nature of the military environment and work conditions has been known to cause adjustment disorders.

Adjustment disorders can be defined as “maladaptive reactions to identified stressors. They are typified by academic, occupational, or social problems that exceed those normally caused by the stressor” (Rathus & Nevid, 1995, p. 224). Adjustment disorders are also defined as a “mental disorder, the essential feature of which is the development of clinically significant emotional or behavioural symptoms as a reaction to an identifiable psychosocial stressor, involving greater distress than would normally be expected from the stressor and significant impairment in social, occupational, or academic functioning” (Colman, 2009, p. 13).

The researcher’s conceptualisation of adjustment and adjustment disorders is presented in Figure 2.1. No adjustment can lead to adjustment disorders, low adjustment can lead to actions including not accepting a job, leaving the organisation, low levels of socialisation, low levels of job satisfaction, low motivation and low organisational commitment (see Section 2.2.4). High levels of adjustment can lead to attraction to the job, job acceptance intentions, tenure, retention, high levels of socialisation, training and development, high job satisfaction, high motivation and organisational commitment (see Section 2.2.4).

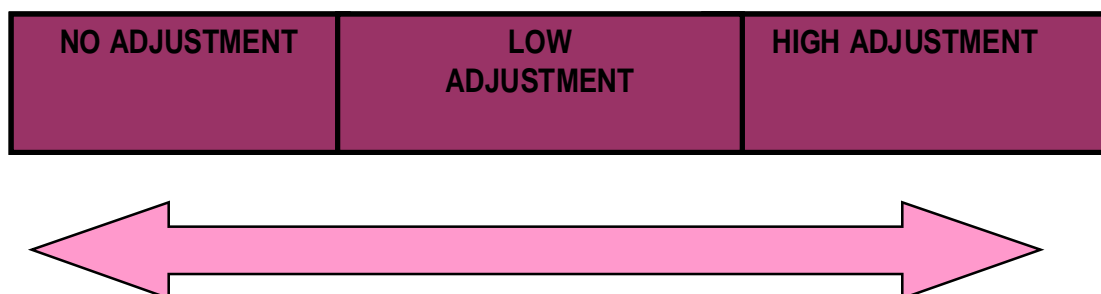


Figure 2.1 Continuum of adjustment

For the purpose of this research adjustment is defined as the continuous and dynamic process of modification of attitudes and or behaviours by an individual when the need arises (either internally or externally) to improve his or her functioning within the work environment.

2.2.2 Theory of person-environment fit

The concept of person-environment fit is fundamental in organisational behaviour research and is a significant forecaster of individual and organisational outcomes (Feij et al., 1999). The benefits or outcomes relevant to the organisation are various (see Section 2.2.4). Person-environment fit can influence an individual's attraction to the organisation (Cable & DeRue, 2002), job acceptance intentions (Carless, 2005), recruitment and selection (Johnson et al., 2003), tenure and turnover intentions (Swanson & Fouad, 1999), organisational culture (O'Reilly, Chatman & Caldwell, 1991), socialization (Feij et al., 1999), career development and management (Saks & Ashforth, 2002), training and development (Hershenson, 1996), job satisfaction (Chen & Chiu, 2008), motivation (Feij et al., 1999) and organisational commitment (Piasentin & Chapman, 2007).

The first congruence or correspondence models between the person and the work environment started with Lofquist and Dawis' general theory of work adjustment (Lofquist & Dawis, 1969; Dawis & Lofquist, 1984). The theory of work adjustment is based on a model of correspondence between the individual and the work environment. The work environment and the individual are in a mutually responsive relationship in which either can respond to stimulus conditions (Dawis & Lofquist, 1984).

The theory of work adjustment is considered a theory of person-environment fit (Breiden et al, 2006; Swanson & Fouad, 1999). The person-environment fit theory refers to "the congruence, match or similarity between the person and the environment" (Edwards, 2008, p. 168). Person-environment fit theories propose that "positive responses occur when individuals fit or match the environment" (Carless, 2005, p. 411). Person-environment fit theory explains

the fit between a person and his environment that can lead to positive outcomes. These positive outcomes are addressed under the utility of person-environment fit later in this section (see Section 2.2.4).

Person-environment fit theories have furthermore been sub-divided by some authors in the field of recruitment and selection (Carless, 2005). Person-job fit and person-organisation fit have been identified as falling under the more general term of person-environment fit. Person-job fit refers to a “match between an individual and the requirements of the specific job” (Carless, 2005, p. 411) whilst person-organisation fit refers to the “compatibility between people and the organisations in which they work” (Hoffman & Woehr, 2006, p. 390). In a meta-analysis of the literature on fit and congruence, Hoffman and Woehr (2006) resulted in 121 studies that discussed the relationship between person-environment fit and organisational outcomes. These studies included the concepts of person-organisation fit, person-job fit and value congruence under the broader concept of person-environment fit. Thus, for the purpose of this research study, person-environment fit contains person-job fit as well as person-organisation fit, because it describes environmental fit as including both the aspects of person-job fit and person-organisation fit.

The broader concept of person-environment fit can be expanded in terms of supplementary fit and complementary fit (Edwards, 2008). Supplementary fit suggests that “the person supplements, embellishes or possesses characteristics which are similar to other individuals in the environment” (Edwards, 2008, p. 170). Supplementary fit occurs when “a person and organisation are similar on fundamental characteristics” (McCulloch & Turban, 2007, p. 63). Chen, Lee and Yeh stated that “supplementary fit occurs when a person’s characteristics are similar to others in the organisational environment” (2008, p. 211). For example, within the military environment supplementary fit will exist when most of the soldiers within one unit or

grouping possess similar characteristics, such as determination, perseverance and hardiness⁶.

Complementary fit suggests that “a weakness or need of the environment is offset by the strength of the individual, and vice versa” (Edwards, 2008, p. 170). Thus the individual “makes whole the environment or adds to it what is missing” (De Clercq, Fontaine & Anseel, 2008, p. 278). Complementary fit thus occurs when “a person or the organisation provides attributes that the other party needs; for example the person may have skills needed by the organisation” (McCulloch & Turban, 2007, p. 63). For example, within the military environment complementary fit exists when there is a post for a sniper, and the individual who fills that post is an excellent marksman with exceptional shooting abilities.

Complementary fit can be divided into two categories according to whether the needs are held by the individual or the environment (Dawis & Lofquist, 1984). These two categories are needs-supplies fit and demands-abilities fit (Edwards, 2008). Needs-supplies fit can be defined as “the degree to which the needs of the person are fulfilled by intrinsic and extrinsic rewards in the environment” (Edwards, 2008, p. 170). Needs-supplies fit perceptions are “judgements of congruence between employees’ needs and the rewards they receive in return for their service and contributions on a job (for example pay, benefits, training)” (Cable & DeRue, 2002, p. 875). Demands-abilities fit can be defined as “the degree to which needs of the environment are fulfilled by capabilities of the person” (Edwards, 2008, p. 170). For example, in the military environment, needs-supplies fit exists when a soldier has a need for recognition in terms of medals and rewards, and the military can provide the soldier with those medals or rewards. Demands-abilities fit exist when the military has a specific post (need) for a qualified improvised explosive device disposal person, and there is a soldier who has the specific qualification and skills to fill that post.

⁶ Hardiness is “a psychological style associated with resilience, good health and performance under a range of stressful conditions” (Bartone, Roland, Picano & Williams, 2008, p. 78).

In recent years some amendments were made to the person-environment fit theory. A very useful amendment is a matching model for career decision making as proposed by Parsons (Edwards, 2008). The matching model describes the fit between the individual's attributes and the features of the job (Edwards, 2008). This model purports that career choices are influenced by three broad factors, namely having "(1) a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations and their causes; (2) a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different lines of work; and (3) true reasoning on the relations of these two groups of facts" (Edwards, 2008, p. 173). This matching model predicts that people strive to achieve a match between their personal attributes and the characteristics of the work environment (Edwards, 2008). Person-environment fit suggests that if individuals fit well into the organisation, the result will be more positive behaviours and attitudes displayed by the individual (Amos & Weathington, 2008).

Van Esbroeck (2011) observed that amendments to the person-environment fit theories in recent years and the progression in the assessment of individual diversity have enhanced the empirical use of individual assessments within occupational theories and career development. The utility of the person-environment fit theories within the organisation is however expanded upon later in this research assignment, but understanding the nomological net of factors contributing to successful work adjustment and person-environment fit, can contribute to its utility within the workplace. This research has subsequently attempted to delve into some of these nomological factors contributing to the fit or match (or lack thereof) between individuals and their work environment, with specific reference to the military work environment.

2.2.3 Theories of work adjustment

The theories of work adjustment are regarded as theories of person-environment fit or correspondence between the person and his or her work environment (Breiden et al, 2006; Edwards, 2008; Swanson & Fouad, 1999).

From an overview of the literature on work adjustment by Swanson and Fouad, there are two prominent theories that attempt to explain work adjustment (Swanson & Fouad, 1999). The first theory of work adjustment was developed and published by Lloyd Lofquist, George England and René Dawis from the University of Minnesota in 1964. Thereafter Lofquist and Dawis revised it in 1968 (Lofquist & Dawis, 1969). Lofquist and Dawis (1969) defined work adjustment as the “correspondence between an individual and his environment implies conditions that can be described as a harmonious relationship between individual and environment, suitability of the individual to the environment, and a reciprocal and complementary relationship between the individual and his environment” (p. 45). Work adjustment can also be defined as “the process during which the individual develops the overall skills and abilities needed to meet the demands of the work environment” (Strauser & Lustig, 2003, p. 129).

The prediction of work adjustment can be envisaged through conceptualising the relationship between individuals and their specific work environments. It is important to place people in the correct jobs according to the amount of correspondence found between the individual’s skills, abilities, personality and the work environment and with its requirements and rewards (Lofquist & Dawis, 1978). This theory follows a trait-and-factor approach through which the individual’s skills are matched to specific job prerequisites, while also matching his or her individual wants and values with the rewards provided by the organisation (Breiden et al, 2006; Hershenson, 1996; 2001). Thus, in the career counselling field an individual’s work adjustment has played an inherent role. In support of this, Van Esbroeck (2011) observed that the initial trait-and-factor approach to career development has evolved into person-environment fit theory, in which the fit between the individual and his work environment is analysed.

Another theory of work adjustment was developed by David Hershenson in 1974. This theory describes work adjustment as an interaction among three interacting subsystems within the person and the person’s work environment (Hershenson, 2001). The three basic components in the work environment

are identified as the culture of the organisation and the behaviour the employee has to display to fit into this culture, the primary tasks the employee has to perform and whether the employee possess the necessary skills to do so, and remuneration and benefits provided by the organisation and the opportunities created for the employee (Hershenson, 1996).

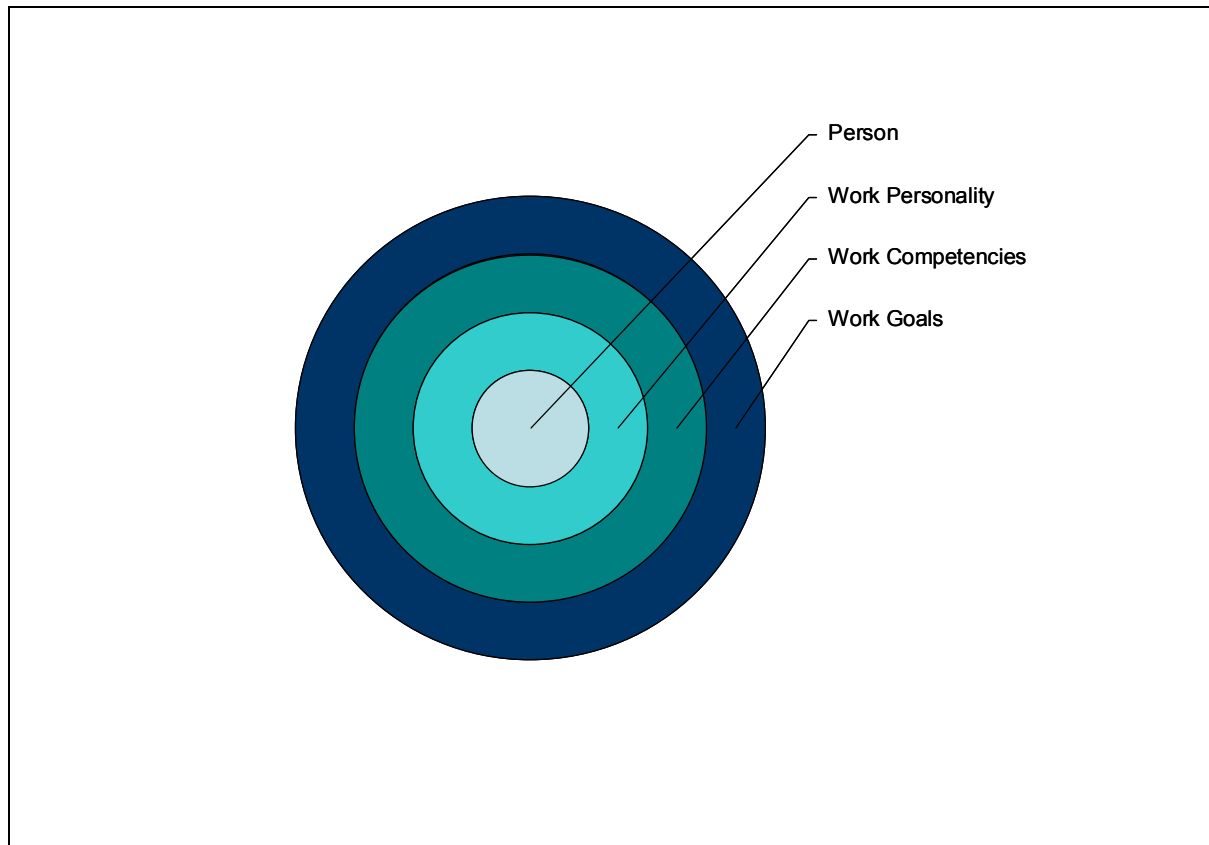


Figure 2.2 Hershenson's (2001) model of work adjustment

The three subsystems identified in Hershenson's theory include (a) the work personality, (b) the work competencies, and (c) the work goals (see Figure 2.2). According to this model, the work personality subsystem is developed during childhood years while the individual is under the influence of his or her family. Thereafter the subsystem of work competencies is developed. These competencies develop during schooling years already. During this stage the individual develops his or her interpersonal skills, physical and mental skills and work habits. Work habits will include several behavioural mannerisms such as neatness and punctuality. The last subsystem to develop is the

individual's work goals. This occurs when the individual leaves school and prepares to enter the world of work. These goals are often influenced by peers and ought to be realistic. For an individual's work goals to be realistic, they should be collaborative and corresponding to his or her work personality and work competencies (Hershenson, 1996). According to Hershenson, the three subsystems develop sequentially, each mostly influenced by an exacting developmental stage. As an individual progresses through life, certain aspects and skills should develop within the specific stage the individual finds himself in. The development of the three subsystems is dependent on the level of development reached by the previous stage (Hershenson, 1996).

According to Hershenson's model (1996), work adjustment is regarded as a systems model that conceptualises the development of work adjustment in the individual. The systems approach refers to a set of intertwined structures (Hershenson, 2001). These structures are each nested within each other, similar to a set of Russian dolls. In the centre of this structure lies the constantly changing and evolving individual (Hershenson, 2001). The three main elements in this theory that is encompassed in work adjustment are work role behaviour displayed by the individual, task performance reached due to the skills and abilities of the individual and employee satisfaction (Hershenson, 1996).

For the purpose of this research the theory of work adjustment of Lofquist and Dawis was utilised. They defined work adjustment as "the continuous and dynamic process by which the individual seeks to achieve and maintain correspondence with his or her work environment" (Dawis & Lofquist, 1976, p. 55). The researcher is of the opinion that this theory can be applied to the military environment as it evaluates the fit between the person and his or her work environment. It appears to be a suitable model that can be adapted to evaluate the unique military work environment and outcomes for the organisation. This theory will now be explicated.

The Lofquist and Dawis (1969) theory of work adjustment comprises of a number of official suppositions and its consequences that address the process of adjustment to the work environment. These nine suppositions (Dawis, 1973) identify features of the individual and the work environment that forecast job satisfaction and tenure (Lofquist & Dawis, 1969). This model is depicted in Figure 2.3 below.

The constructs in the theory play a role in whether an individual would be satisfied on the job and how long he or she will remain in the job. A main assumption of the theory is that individuals fundamentally seek to achieve and to maintain correspondence with their environments. Correspondence can be explained as the harmonious correlation between the individual and the work environment (Breiden et al, 2006; Dawis, Freuhling & Oldham, 1989).

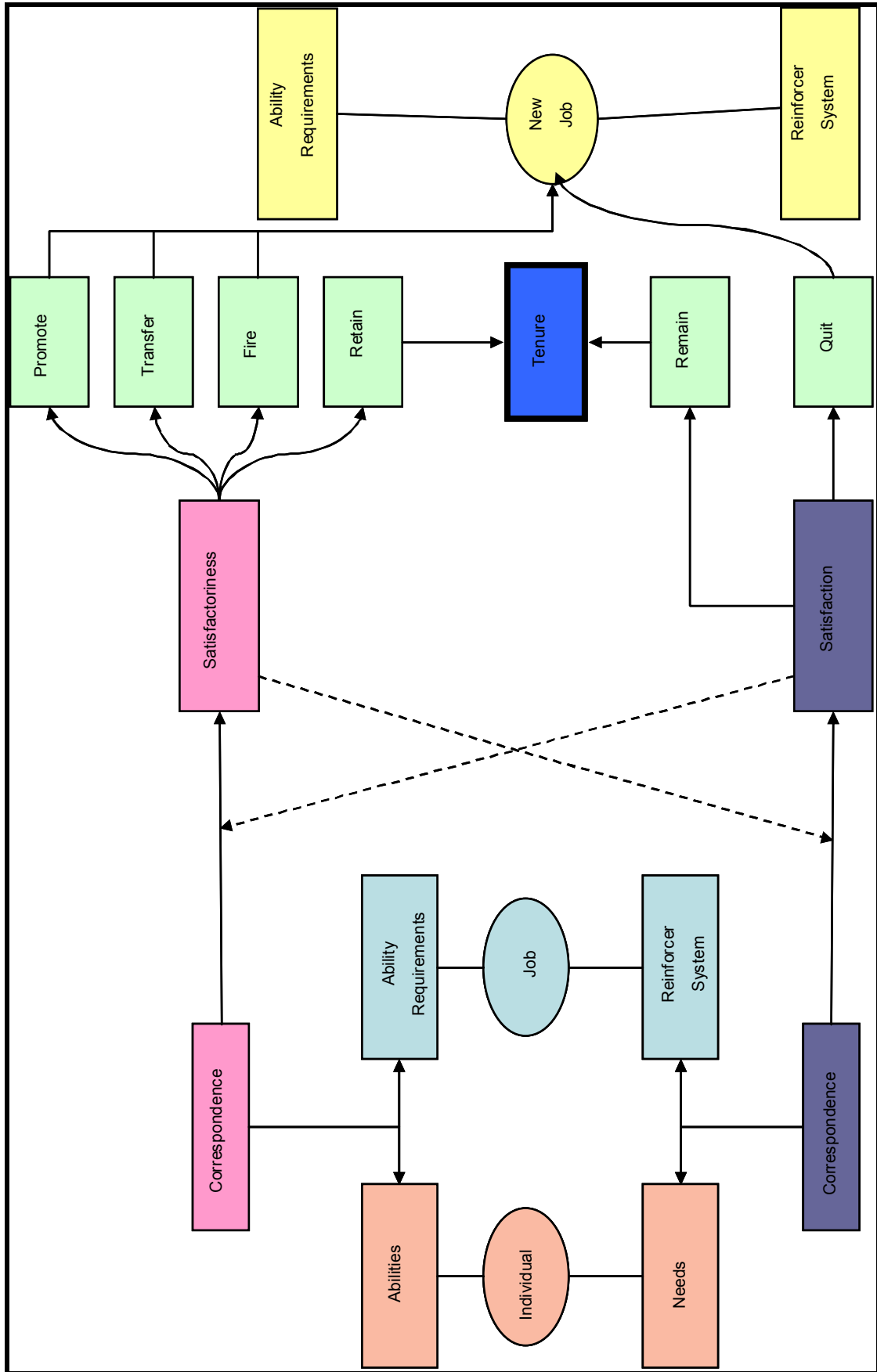


Figure 2.3 Dawis and Lofquist theory of work adjustment (1969)

The different central constructs in the theory comprise the individual and the job. A graphical representation is in Figure 2.4. The individual has abilities that have to be congruent with the ability requirements presented by the work environment, whilst the individual also has needs that have to be met by the work environment's reinforcer systems or rewards (Lofquist & Dawis, 1969). Work adjustment refers to the correspondence between the work personality and the work environment (Lofquist & Dawis, 1976). This relationship and level of correspondence between the individual and the work environment is regarded as mutually responsive (Dawis, 1973). These constructs will now be explained.

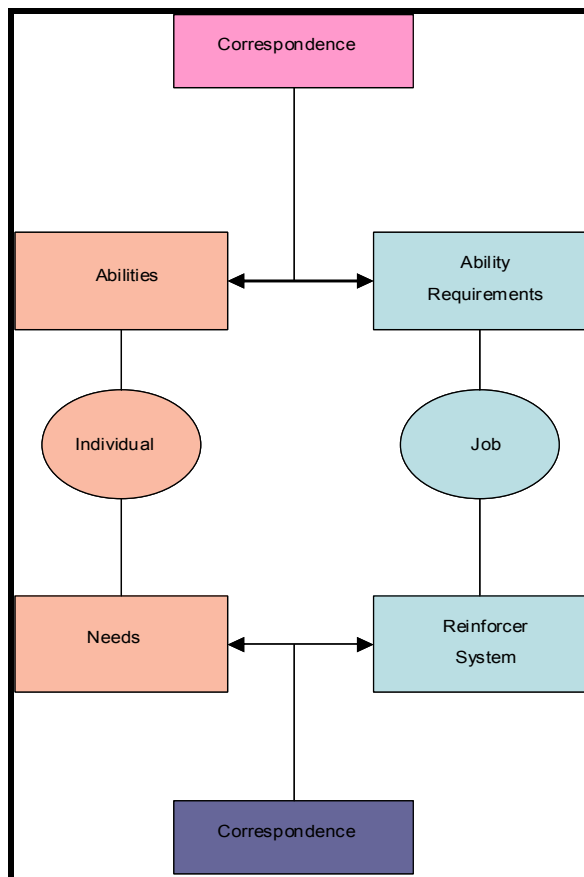


Figure 2.4 Central components of work adjustment

The individual within the workplace possesses a specific work personality structure. Individuals' different work personalities can influence their level of correspondence with the work environment and affect their response to

adjustment (Lofquist & Dawis, 1976). Work personality can be defined as “the characteristic patterns of thoughts, feelings and behaviours at work” (Heller, Ferris, Brown & Watson, 2009, p. 1055). Work personality can be viewed as “an extensive developmental process that subsumes a full range of abilities, temperaments, motivation, values and attitudes. Theoretically, work personality addresses the correspondence between the individual and work environment” (Strauser, O’Sullivan & Wong, 2010, p. 2000).

Work personality is also defined as “the individual’s self-concept as a worker, the person’s system of motivation and the person’s work-related needs and values” (Strauser & Waldrop, 1999, p. 3). Work personality can also be regarded as the development of appropriate work-related behaviours “that allow people to meet the interpersonal demands of the work environment (for example appropriate social interaction with peers and supervisors, timeliness, on-task behaviour” (Strauser, Lustig & Ciftci, 2008, p. 22).

Personality often utilises groups of variables to predict future life outcomes (Mayer et al., 2000). Barrick and Mount (2005) confirmed that personality is important in the workplace, because it can predict and explain behaviour at work. Work personality has also associated with various theories of occupational development and work adjustment (Strauser & Waldrop, 1999). In the organisational environment the description of personality in relation to behaviour at work should be demarcated to those abilities and needs that are the most relevant to the work (Lofquist & Dawis, 1969).

Deducing from the aforementioned descriptions of work personality, the following definition of work personality has been formulated for the purpose of this research: work personality encompasses those traits, abilities and needs that are possessed by an individual and that are applicable to the work environment. As will be eluded upon later in this chapter (see Section 2.4), this research has explored the possible existence of relationships between certain personality aspects and work adjustment within the military work environment.

Work personality is regarded as one of the individual spheres that interact with work competencies and work goals to enhance work adjustment (Strauser & Waldrop, 1999). It is proposed that individuals with more developed work personalities “should be able to cope more effectively with the contextual and interpersonal demands of the work environment and demonstrate more effective work-related role behaviour, which increases the probability of successful work adjustment” (Hershenson, 1996, p. 443). This view is supported by Strauser et al. (2010), and is also expanded by adding that “individuals with more developed work personalities should feel more positive about past events and have a clearer view of both their good and bad qualities” (Strauser et al., 2008, p. 33).

The individual’s abilities are shaped by his skills. The variety of skills an individual possesses can be quite large, and thus skill dimensions are utilised to identify skills across various individuals. Using factor analysis a smaller number of more basic dimensions can be identified, resulting in ability dimensions. These dimensions are most commonly used during psychological testing to measure individual abilities (Lofquist & Dawis, 1969; 1991).

The individual brings specific needs to the work environment. In the context of work adjustment, these needs refer to psychological needs, and not needs borne from conditions of deprivation (Lofquist & Dawis, 1991). The individual’s needs are deduced from the amount of reinforcement received from the environment. As an individual matures the psychological needs reach relative stability (Lofquist & Dawis, 1969).

The relationship between the individual and his work environment is shaped by the individual’s requirements of the environment as well as the environment’s requirements of the individual. For the individual to continue to exist in an environment he has to reach a certain amount of correspondence (Dawis et al., 1989). This is however not a static process, but rather a dynamic, continuously changing process (Feij et al., 1999; Lyons, Brenner & Fassinger, 2005). The individual brings specific skills to the work

environment. The work environment supplies specific rewards to the individual. These rewards can include salaries, prestige and personal relationships. The individual's skills facilitate him to react to the requirements of the work environment (Lofquist & Dawis, 1969).

The rewards of the work environment form the means through which the environment reacts to the requirements of the individual. When both of their basic requirements are mutually fulfilled, the individual and the work environment are described as correspondent. In a work situation correspondence can be depicted in terms of the individual satisfying the requirements of the work environment, and the work environment satisfying the requirements of the individual (Lofquist & Dawis, 1969).

According to Dawis (1973) an individual's behaviour is focused on satisfying his requirements upon entering a new work environment. Examples of an individual's requirements can include the payment package offered by the organisation, extra benefits provided such as pension funds and medical aids or his personal goals to be achieved in the organisation. Requirements from the work environment can include the goals and outputs of the organisation that are achieved, the amount of hours spent in the work environment and compliance to the organisation's culture. In return the individual expects rewards from the work environment. If the relationship is correspondent the individual will strive to preserve the relationship (Lofquist & Dawis, 1991). If there is no correspondence the individual will work towards achieving correspondence. If the correspondence cannot be achieved, the individual will leave the work environment. Due to the fact that every individual is unique and every work environment is different from the next, every individual-environment relationship will be distinctive (Lofquist & Dawis, 1984).

The individual who accomplishes minimum correspondence with his work environment will continue to work in that environment. This in turn influences the individual to attain a more optimal correspondence and this will stabilise the relationship. Once stability has been reached, it will become evident in the tenure of the individual (Dawis & Lofquist, 1984; 1991). Tenure is the

principal indicator of work adjustment (Breiden et al., 2006; Dawis, 1973; Dawis & Lofquist, 1984; Swanson & Fouad, 1999). The higher the corresponding relationship levels, the longer the employee will remain in the environment and it is anticipated that length of tenure will probably increase. The opposite is also probable. The lower the corresponding relationship levels, the shorter the period that the individual will remain in the work environment. Tenure is a function of the correspondence between the individual and his work environment (Lofquist & Dawis, 1991). Tenure occurs when an individual is satisfied and has the abilities to do the job (Breiden et al., 2006; Swanson & Fouad, 1999).

Correspondence and tenure guide the way to the development of the constructs of satisfaction and satisfactoriness. Satisfaction and satisfactoriness serve as indicators of work adjustment (Dawis, 1973, (Lofquist & Dawis, 1991). Satisfactoriness is described as “an external indicator of correspondence; it is derived or obtained from sources other than the individual worker’s own appraisal of his fulfilment of the requirements of the work environment. Satisfaction is an internal indicator of correspondence; it represents the individual worker’s appraisal of the extent to which the work environment fulfils his requirements” (Lofquist & Dawis, 1969, p. 46). Thus satisfaction and satisfactoriness can result in tenure, which the theorists propose as the principle indicator of work adjustment. And tenure can be predicted from the correspondence of an individual’s work personality and the work environment (Dawis & Lofquist, 1984; Lofquist & Dawis, 1991).

2.2.4 Utility of person-environment fit in the workplace

The usefulness of the person-environment fit theory within work adjustment can explain why the organisation, human resource managers and industrial psychologists should strive to attain person-environment fit. Various authors (Breiden et al., 2006; Carless, 2005; Feij et al., 1999; Saks & Ashforth, 2002) have emphasised the importance of person-environment fit as a predictor of organisational and personal outcomes. The theory of work adjustment describes an expressed relationship between the person-environment fit and

workplace outcome variables (Dawis & Lofquist, 1991). Carless (2005) proposed that when there is a fit between the individual and the work environment, positive outcomes will be the consequence.

The utility of person-environment fit within organisations can be in the following fields: attraction to the organisation (Cable & DeRue, 2002), job acceptance intentions (Carless, 2005), recruitment and selection (Johnson et al., 2003), tenure and turnover intentions (Swanson & Fouad, 1999), organisational culture (O'Reilly et al., 1991), socialisation (Feij et al., 1999), career development and management (Saks & Ashforth, 2002), training and development (Hershenson, 1996), job satisfaction (Chen & Chiu, 2008), motivation (Feij et al., 1999) and organisational commitment (Piasentin & Chapman, 2007). Each of these characteristics will be briefly mentioned below as well as the research evidence supporting it.

- Attraction to organisations and job acceptance intentions: The perception of fit is utilised by new job applicants when they decide which organisations and posts they want to fill. Based on the level of fit that they regard themselves relevant to the organisation, job applicants' attraction to the specific organisation or job will be influenced (Cable & DeRue, 2002). Person-environment fit also influences an individual's decision to accept a job offer made by an organisation (Carless, 2005).
- Recruitment and selection: Recruitment can be defined as "any practice or activity carried on by the organisation with the primary purpose of identifying and attracting potential employees" (Noe, Hollenbeck, Gerhart & Wright, 2006, p.194). The recruitment and selection process of organisations utilise the idea of fit between the applicants and the organisation (Cable & DeRue, 2002; Ryan & Kristof-Brown, 2003). Organisations often recruit individuals whose personal value systems fit the organisation's values (Chen & Chiu, 2008; Johnson et al., 2003). During the recruitment and selection process, applicants will be more attracted to an organisation if they receive

positive criticism from recruiters regarding their fit with the organisation (McCulloch & Turban, 2007). Organisations use the fit of applicants to their specific work environments when making selection decisions (Cable & Judge, 1995). Recruiters often select applicants who share the organisation's vision and values (Chen et al., 2008). Organisations can use the actual assessment of person-environment fit in the selection battery (McCulloch & Turban, 2007).

- Tenure: Tenure occurs when an individual is satisfied with his or her job and has the abilities to complete the job. An employee will make decisions to stay with an organisation based on whether he perceives himself to fit into the organisation and the work environment. Individuals perceiving poor fit will most likely decide to leave the organisation (Breiden et al., 2006; Swanson & Fouad, 1999). Some researchers, however, found that people who experience poor fit between the person and the work environment will not necessarily seek correspondence by changing their jobs (Feij et al., 1999).
- Retention and turnover intentions: Turnover intentions are the individual's intent to leave an organisation. Turnover can involve risk and incur transaction and financial costs for organisations. "Turnover intentions are the most direct precursor of turnover behaviour" (Allen, Weeks & Moffitt, 2005, p. 980). The level of person-environment fit significantly predicts employee retention (McCulloch & Turban, 2007; Piasentin & Chapman, 2007). The higher the levels of person-environment fit, the more the individual's intention to leave the organisation will decrease (Cable & DeRue, 2002; O'Reilly et al., 1991; Ryan & Kristof-Brown, 2003). Analogous to this, Hoffman and Woehr (2006) found only a moderate relationship between fit and turnover. But the majority of research found stronger relationships between fit perceptions and turnover intentions. By having a higher person-environment fit, organisations can appoint individuals who will be more likely to stay longer with the organisation (McCulloch & Turban, 2007).

Person-environment fit also predicts employees' turnover intentions (Saks & Ashforth, 1997; Von Kirchheim & Richardson, 2005; Westerman & Cyr, 2004). The importance of person-environment fit was emphasised by McCulloch and Turban (2007) when they observed that person-environment fit is also suggested as a measure to select employees for jobs with a high turnover rate.

- Organisational culture: Organisational culture is “a pattern of basic assumptions, invented, discovered, or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, is to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (Dunn & Schweitzer, 2005, p. 48). Higher levels of person-environment fit will increase the individual's conformity to the organisational culture and value systems (O'Reilly et al., 1991; Ryan & Kristof-Brown, 2003).
- Socialisation: Socialisation is defined as “the process through which people are integrated into a society by exposure to the actions and opinions of others” (Reece & Brandt, 2005, p. 140). The fit between the person and his work environment is a predictor of the socialisation within that specific work environment (Feij et al., 1999). Organisations who appoint individuals with a high level of person-environment fit will ensure that newcomers socialise quicker into the new work environment than individuals with poor person-organisation fit (Chen & Chiu, 2008).
- Career development and management: Most research conducted in the field of work adjustment can be utilised for career development and management by organisations and employees. Organisations can use it for strategic planning that addresses the progress of individuals, while employees can utilise it to map their own career paths in life that might expand over more than one organisation. Career counsellors

can analyse and facilitate interventions addressing the issues of maladjustment where the individual is not adjusting according to his or her needs or the expectations of the organisation (Hershenson, 1996). An individual will utilise his or her perception of fit with the work environment when they participate in career planning (Saks & Ashforth, 2002). Cable and DeRue (2002) subsequently concluded that people's perception of fit therefore influences how they enter and manoeuvre through organisations.

- Training and development: Individuals or organisations can identify traits, skills or abilities that will increase person-environment fit with the organisation (Hershenson, 1996). These can be utilised by the organisation or career managers to assist with designing of specific training and developmental opportunities for employees (Freedman, 2009; Hartmann et al., 2003; Hershenson, 1996; Martin, 2006). Aspects of work adjustment can be included in training and development programmes to enhance the adjustment capabilities of employees (Tucker & Gunther, 2009).
- Job satisfaction: Job satisfaction is generally defined as "one's feelings and attitude towards one's job, and all aspects of a particular job, whether good or bad, tend to contribute towards the development of feelings of satisfaction or dissatisfaction" (Singh & Dubey, 2011, p. 42). Employees' job satisfaction is influenced by the amount of correspondence they experience between themselves and their work environment (Breiden et al., 2006; Lyons et al., 2005). Person-environment fit improves individual levels of job satisfaction (Chen & Chiu, 2008; Huffman, 2007). A high level of person-environment fit predicts higher levels of job satisfaction (Feij et al., 1999; O'Reilly et al., 1991; Piasentin & Chapman, 2007; Ryan & Kristof-Brown, 2003; Saks & Ashforth, 1997; Von Kirchheim & Richardson, 2005; Westerman & Cyr, 2004).

- Motivation: Motivation refers to the “set of factors that activate, direct and maintain behaviour, usually toward some goal” (Huffman, 2007, p. 422). The congruence between a person and his work is an important predictor of the individual’s level of motivation. The higher the congruence, the higher the individual’s level of motivation will be (Feij et al., 1999; Saks & Ashforth, 2002). Organisations should design jobs that possess intrinsically motivating characteristics such as feedback and autonomy that can reduce stress and increase motivation (Chen & Chiu, 2008.)
- Organisational commitment: Organisational commitment is defined as “a psychological link between the employee and the organisation that makes it less likely that the employee will voluntarily leave the organisation” (Abbott, White & Charles, 2005, p. 532). Research regarding organisational commitment indicated that person-environment fit is a significant predictor of organisational commitment. The higher the levels of person-environment fit, the higher the levels of organisational commitment will be experienced by the individual (O’Reilly et al., 1991; Piasentin & Chapman, 2007; Ryan & Kristof-Brown, 2003; Saks & Ashforth, 1997; Westerman & Cyr, 2004).

Building on the central components of the theory of work adjustment, this research adapted the model of Lofquist and Dawis (1969) to the military work environment by proposing the congruence or fit between the person and the environment that can result in the level of adjustment experienced by the individual, resulting in different outcomes for the individual and the organisation. Through the course of the literature review this model is expanded upon. Figure 2.5 is a graphic representation of this adaptation. The person and the environment interact and correspondence or non-correspondence is the outcome. This work adjustment leads to several organisational gains.

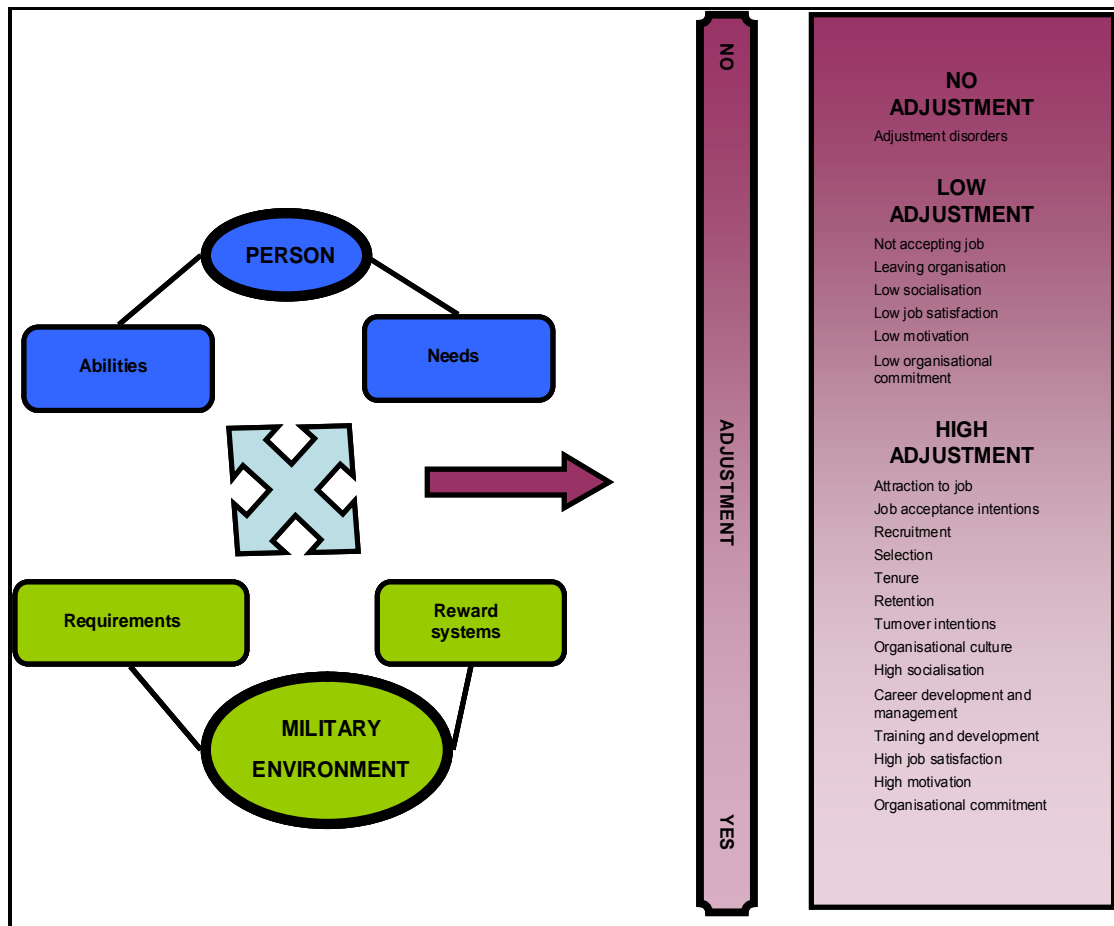


Figure 2.5 Work adjustment leading to organisational gains

This section of the literature review has explained adjustment in terms of the person-environment fit theory, the theories of work adjustment, the concepts of adjustment, adaptation and maladjustment, as well as the utility of person-environment fit within the workplace. Based on the theory of person-environment fit, the literature review will now address elements of the two main components, namely the environment and the person. Within the environmental component, the military environment will be expounded upon. Thereafter specific personality traits within the paradigm of the personal component will be expounded upon.

2.3 MILITARY ENVIRONMENT

In this section the literature review presents elements of the environmental component of the theory of person-environment fit. As stated previously (see

Section 1.2), the military environment is regarded as a unique organisation with some distinct factors influencing its individuals. These factors are graphically portrayed in Figure 2.6. Each of these factors will now be explained as portrayed by the current literature.



Figure 2.6 Factors of the military environment

A study by Dekel, Solomon, Ginzburg and Neria (2003) examined the contribution of exposure to specific battle stressors to combatants' battlefield functioning and long-term psychological adjustment. The battlefield stressors included life-threatening situations, injuries and death, active fighting and the ability of one's own army. The participants were involved in the 1973 Yom Kippur War. The participants were divided into three categories according to their wartime functioning: combat stress reaction casualties, decorated war heroes and controls (those members who functioned effectively but without special distinction). Findings show that, even though the decorated war heroes reported the highest exposure to battlefield stressors, they functioned better than the other two groups during the war. Moreover, two decades later, they showed lower rates of post-traumatic stress disorder and better general

psychological health than the combat stress reaction casualties. Findings also indicated that battlefield functioning made a greater contribution to post-war pathology than battlefield stressors. Research on combat stress reaction proposed that the length and intensity of the combat and exposure to life-threatening situations and intense feelings of helplessness are all positively associated with the incidence of combat stress reaction (Dekel et al., 2003).

Due to some similarities between internationally deployed military personnel and expatriates (see Section 1.1) it is important to observe that work adjustment is regarded as a principal component to an expatriate's overall adjustment to the host country, the new work environment and productivity (Breiden et al., 2006). Morley and Flynn (2003) are of the opinion that expatriates have to adjust in three domains while on assignment, namely adjustment to work, adjustment to host-nationals and adjustment to the general non-work environment. This describes work adjustment from a multi-dimensional perspective. Hence, it can be postulated that military personnel will also have to adjust to these three domains, but with the added stressors of the military work environment.

Thus, drawing from the research of the civilian expatriates' experiences, it is proposed that military personnel will be faced at a minimum with similar challenges as expatriates during their work adjustment. The degree of fit between an expatriate's needs and the benefits provided by the assignment influences the expatriate's level of work adjustment. The level of correspondence between the expatriate manager's need for good relationships with his superiors, need for remuneration and financial benefits as well as his need for career advancement, and the degree to which the organisation fulfil these needs is vital in determining the emotional satisfaction of expatriate managers (Breiden et al., 2006).

Role ambiguity is a prominently unique challenge facing deployed personnel. Training usually focuses on war and its associated roles as soldiers, but very often military personnel are deployed in peacekeeping and peace enforcement missions (Campbell & Nobel, 2009). Role conflict is regarded as

a cause of chronic stress and has a major impact on job satisfaction, psychological distress, burnout and somatic complaints (Singh & Dubey, 2011). Mission⁷ ambiguity arises when soldiers might be prepared to execute one type of mission, but on short notice have to adapt and adjust to another type of mission. Mission ambiguity also exists when soldiers are confronted with various types of missions, including war, peace keeping and peace time environments, and they might be unclear as to their role within the specific mission (Killion et al., 2009). An example of this is when the SANDF deployed on a peacekeeping mission to the Central African Republic. Soldiers were prepared for their role as peace keepers, but due to a change in the political environment in the beginning of 2013, the SANDF mission came under direct fire and was in a war situation defending their positions against the rebels during the Battle of Bangui.

This creates role ambiguity and confusion and soldiers can be uncertain as to what extent of force will be applicable and the rules of engagement. The unique demands of role responsibility also inadvertently play a role. The soldier has to take responsibility for his own equipment, his fellow soldiers and sometimes civilian members while they have to execute their primary task in the operational environment (Campbell & Nobel, 2009). Whilst deployed on peacekeeping missions, soldiers are only allowed to use force in self-defence. Soldiers must display restraint and control. They have to manage their fight and flight responses to stressful encounters. Most critical to a peacekeeping role is the peacekeeper's ability to remain neutral within the midst of the conflict (Dirkzwager, Bramsen & Van Der Ploeg, 2005). Under these circumstances it is evident that deploying soldiers are continuously confronted with various forms of ambiguity and have to regulate or adjust their behaviour to fit the needs of the mission.

In certain situations soldiers deploy for an indefinite period, and this can lead to anxiety regarding their separation from homes and family (Campbell & Nobel, 2009). While away from home the soldier diverts to emotional

⁷. A mission is defined as "a specific task assigned to a tactical grouping" (Bowyer, 2004, p. 159) within the deployed forces.

distancing in order to assist him or her with coping and adjusting to the deployment situation. But then on return to the family he/she can struggle to change this mindset and again engage emotionally with his/her family. Unresolved physical and emotional injuries during deployment can also result in family reintegration issues (Campbell & Nobel, 2009; Gottman, Gottman & Atkins, 2011). The partners of deployed military personnel who stay behind also experience psychological distress. When the partners experience higher levels of work-family conflict and social isolation, they also experience higher levels of psychological distress (Andres, Moelker & Soeters, 2012).

Military personnel on deployments are at significantly higher risk for mental health problems (Schmitz, Schmied, Webb-Murphy, Hammer, Larson, Conway ...Johnson, 2012). The psychological strains within the military environment can include feelings of isolation, confusion and ambiguity, powerlessness, boredom and feeling under threat or in danger (Campbell & Nobel, 2009). When under threat, soldiers can accept the risk of dying as a form of denial and defence (van den Berg & Soeters, 2009). Psychological problems are one of the main causes of attrition in the military environment (Peterson et al., 2011). Military operations⁸ can last for extended periods and this can often cause a lack of sleep, battle fatigue, acute combat stress casualties and the loss of life of fellow combatants. All these dimensions coincide and jointly affect continued optimal performance in individuals, combat groupings and units. Adjustment to the military lifestyle is stressful, regardless of whether members are in combat or not (Killion et al., 2009).

Personnel working in the military environment are often faced with duties that must be performed in life threatening or unfavourable conditions. These operations are characterised by extreme temperatures, physical terrain, toxic substance exposure (Campbell & Nobel, 2009), anxiety, sensory overload, sensory deprivation (Sumer & Sumer, 2007), fatigue, dehydration, isolation and information overload (Killion et al., 2009). Traumatic events can also lead to acute or chronic symptoms including disturbed sleep, demoralisation,

⁸ An operation can be described as “a planned military task involving various branches of the armed forces” (Bowyer, 2004, p. 173).

anger, alienation, isolation, guilt and feelings of insanity (Riolfi, Savicki & Spain, 2010).

Peacekeeping soldiers are also exposed to several life-threatening conditions. These include shooting incidents, being taken hostage and hostile reactions from the conflicting parties. Correspondingly, while providing humanitarian aid they can bear witness to elements of human distress, including starvation, sick or wounded civilians (Dirkzwager et al., 2005). These soldiers are also regarded to be on duty 24 hours a day, seven days a week. Thus the difficulties they experience are much greater than those for individuals in a regular 'nine-to-five' work (Ippolito, Adler, Thomas, Litz & Holzl, 2005).

The individuals' stress-resilient personality traits can influence their level of well-being within these stressful encounters. These traits can include optimism, positive emotionality, hardiness, hope and ego resilience. Individual differences that are associated with stress resilience and adjustment can enhance coping and health (Schaubroeck, Riolfi, Peng & Spain, 2011). A study conducted on military cadets at the Netherlands Defence Academy and recruits of the Dutch Air Mobile Brigade confirmed that coping behaviour is an important factor when members are performing under acute stress (Delahaj, Van Dam, Gaillard & Soeters, 2011). Poor psychological health has accounted for turnover within the United States military within the first six months of service (Skomorovsky & Sudom, 2011).

Bartone (2006) identified six primary psychological stress dimensions in modern military operations. The dimensions are isolation, ambiguity, powerlessness, boredom, danger and workload. In a study conducted on 162 soldiers from the SANDF who participated in peacekeeping missions in the Democratic Republic of the Congo, van Dyk (2009) concluded that the following factors formed the most important stressors for the members involved: services from the army, separation from the family, poor communication, limited recreation, boredom and a lack of recognition.

Even though the focus of this research was not on psychopathology, it is worth mentioning that deployment is stressful and can be associated with

increased mental health problems for both combatants and non-combatants (Peterson, Wong, Haynes, Bush & Schillerstrom, 2010). According to a press release in the United States, 30 percent of soldiers returning from the Iraq war have experienced one form or another of mental problems. These include anxiety, depression, nightmares, anger and the inability to concentrate. Around 15 to 17 percent of returning soldiers in 2004 experienced acute stress or post-traumatic stress disorder (PTSD) (Greene-Shortridge, Britt & Castro, 2007).

Dirkzwager and others are of opinion that various outcome variables such as anxiety disorders, adjustment disorders, depression or substance abuse should be included in research in order to obtain a meaningful and complete framework of psychological adjustment difficulties after exposure to combat-related events (Dirkzwager et al., 2005). A study of soldiers deployed to Bosnia-Herzegovina as part of a peacekeeping mission found that deployment length was related to increases in depression and PTSD (Adler, Huffman, Bliese & Castro, 2005). A study of soldiers deployed to Iraq and Afghanistan studied the effect of repeated deployments on soldiers' health. The results indicated that soldiers who had previously deployed were three times more likely to screen positive for PTSD and major depression (Kline, Falca-Dodson, Sussner, Ciccone, Chandler, Callahan & Losonczy, 2010). After exposure to acute work-related stressors, soldiers have reported more negative psychological, behavioural and physical health complaints. Individuals who are able to cope with acute traumatic events are able to adapt to their circumstances in the event that they do not employ a maladaptive coping style (Day & Livingstone, 2001).

But not all soldiers exposed to severe and acute traumatic events struggle to adjust. Research among military personnel participating in international peacekeeping operations since 1975 indicated that most soldiers adjust well following deployment, although PTSD rates among peacekeeping personnel can vary. Positive consequences experienced by members participating in peacekeeping operations have also been reported. Peacekeepers reported that "more than 80% of them felt that their peacekeeping experience

broadened their horizon, 70% looked back on the deployment with a good feeling, and more than half reported that the deployment period increased their self-confidence and was characterised by comradeship” (Dirkzwager et al., 2005, p. 49). Another study on United States military personnel who participated in the Operation Iraqi Freedom also supported the notion that the majority of soldiers returning from deployment do not exhibit PTSD symptoms (Skopp, Reger, Reger, Mishkind, Raskind & Gahm, 2011).

A study conducted in the United States Army found an unexpected result regarding the multilevel effects of occupational stressors on soldiers’ well-being. In the units where soldiers were working longer collective hours the soldiers reported higher levels of affective commitment, and more job engagement. The explanation provided for this phenomenon includes the possibility that the meaning of working long hours differs for soldiers from employees in civilian organisations. It is suggested that the longer hours of work allow for opportunities to enhance group cohesion and socialisation and an increased group identity (Tucker, Sinclair & Thomas, 2005).

From the above literature review, the work adjustment model has once again been modified for this research. Building on the central components of the theory of work adjustment, this research has adapted the model of Lofquist and Dawis (1969) to the military work environment by proposing the congruence or fit between the person and the environment that can result in the level of adjustment experienced, resulting in different outcomes for the individual and the organisation. Figure 2.7 is a graphic representation of this adaptation. The person and the environment interact and correspondence or non-correspondence is the outcome.

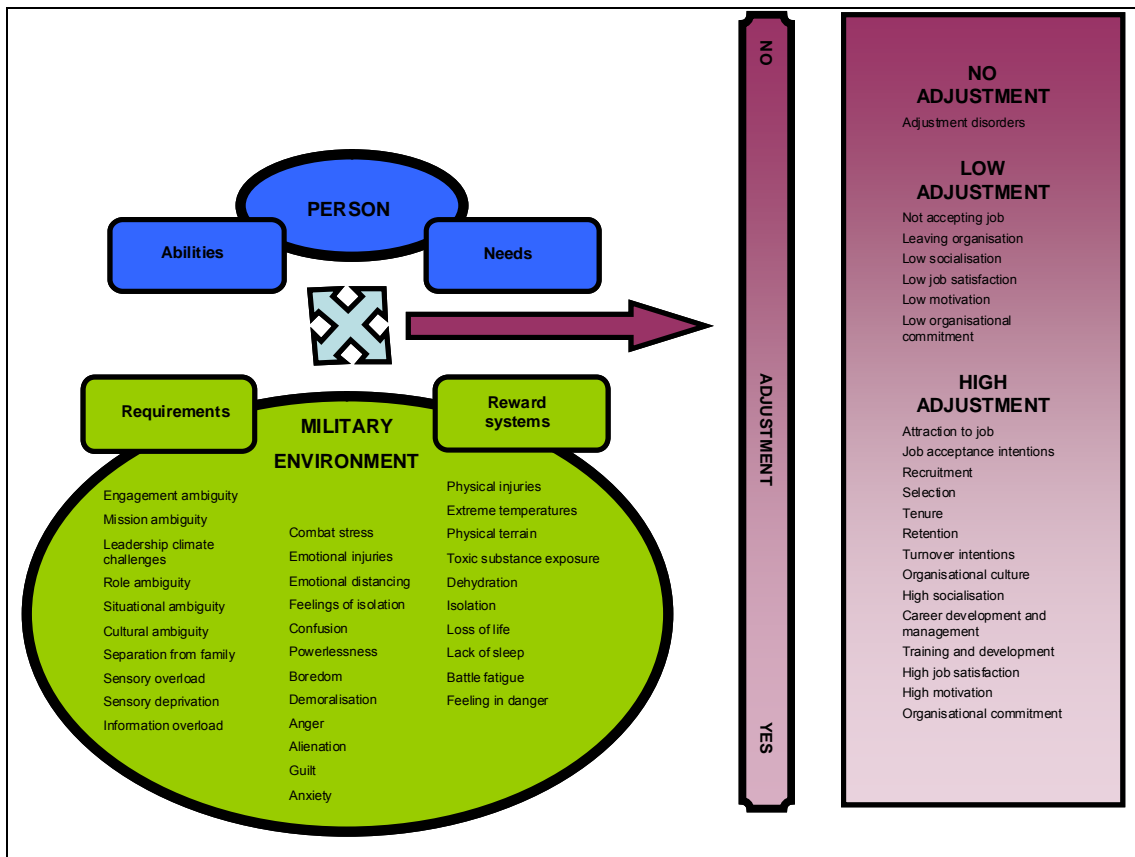


Figure 2.7 Military environment and work adjustment

Therefore, research on work adjustment within a military environment is of significance. Both the individual and the organisation as a whole can benefit from research that helps define the nomological net of factors that influence adjustment to the military environment. This concludes the section on the military environment as part of the theory of person-environment fit. This section has enlightened some of the unique challenges within the military as a work environment. The second component of the theory of person-environment fit is discussed in the next section, namely the person.

2.4 PERSON VARIABLES

According to Lofquist and Dawis (1991) personality characteristics can be analysed to determine the congruence or degree of fit between the person and the environment. Hough (2003) stated that various decisions have to be made when conducting research and building models. One of the critical decisions involves the dependent or criterion variables. In past research the

relationship between personality variables and various criterion variables has been examined. It is suggested that it is important to investigate a variety of personality variables other than the Big Five within both the civilian and military workplace (Hough, 2003).

In the research of person-environment fit theories and work adjustment, the importance of personality has been established. Personality is regarded as stable over time (Ryan & Kristof-Brown, 2003). Researchers in the organisational and industrial psychology field have been interested in the potential of measures of personality to depict, explicate and predict individuals' behaviour at work (Johnson, 2003). According to Ryan and Kristof-Brown (2003) more research is needed to establish the role of personality within the person-environment fit theory.

The purpose of this research is to act as a starting point to address the research gap between the antecedents of work adjustment within the military environment. As will be eluded upon later in this section, this research study has explored the possible existence of relationships between certain personality aspects and work adjustment within the military work environment. Therefore emotional intelligence (see Section 2.4.1), locus of control (see Section 2.4.2), self-efficacy (see Section 2.4.3) and sense of coherence (see Section 2.4.4) as personality variables were investigated to determine possible relationships with work adjustment (see Section 1.3). Therefore, within the demarcation of this research, the next section of the literature review describes the following four constructs: emotional intelligence, locus of control, self-efficacy and sense of coherence. The section will enunciate the origin, definitions, models and relevant research of each construct. This research study has attempted to establish the relationship between these personality variables and work adjustment within the military work environment.

2.4.1 Emotional intelligence

Emotional intelligence is one of the personal variables that could play a role in the adjustment of individuals within their work environments. Emotional intelligence has been investigated as a scientific construct that has significant expounding and prognostic potential for behaviour within the workplace (Lyusin, 2006; Matthews & Zeider, 2000; Palmer, 2007). Two major elements that help conceptualise the emotional intelligence construct are adjustment and stress management (Bar-On et al., 2006). Work adjustment has also been found to have a positive relationship with emotional stability, which is included in the emotional intelligence make-up (Griffin & Hesketh, 2003).

Leuner first coined the term *emotional intelligence* in 1966 (Lopes, Côté & Salovey, 2006). The general concept was first defined by Thorndike in 1920, but the thematics of the construct itself was initially studied by Darwin as early as 1837. The concept of understanding and studying the adjusting properties of emotions during the process of communication and the direction of behaviour was quite novel. The concept of the emotional fight-or-flight response is one of the invigorating emotional reactions identified (Lopes et al., 2006). Most descriptions of emotional intelligence from Darwin to current times have included some of the following prominent elements: "(a) the ability to understand and express oneself; (b) the ability to understand others and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive mood and to be self-motivated" (Bar-On et al., 2006, p. 4).

Mayer, Salovey and Caruso (2004) defined emotional intelligence as "the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (p. 197). Another definition including emotional skills defines emotional intelligence as "the skill with which one perceives,

expresses, reasons with and manages their own and others emotions” (Palmer, Gicnag, Ekemans & Stough, 2007, p. 60).

An overview of the emotional intelligence literature indicates that essentially three different theoretical approaches exist to explain emotional intelligence (McGuire, 2002; Palmer, 2007; Palmer et al., 2007). The first models are the ability models which view emotional intelligence as the ability to reason with and about emotions. Intelligence and emotion are linked in the concept that emotional intelligence draws from the extent to which a person's cognitive or mental capabilities are informed by emotion as well as the degree to which emotions are cognitively controlled (Mayer et al., 2004). The second models are the trait models. These models propose that emotional competencies (that make up emotional intelligence) are skills that can be learned. Emotional competence is regarded as a learned capability based on emotional intelligence that results in outstanding performance at work (Bar-On et al., 2006).

The third models are the competency models. These models comprise a set of emotional competencies defined as learned capabilities based on emotional intelligence (Goleman, 2001). Goleman proposed that emotional intelligence is a combination of a group of emotional competencies based on emotional intelligence that can be learnt by individuals (Bar-On et al., 2006). The third approach is less prevalent in research, while some authors claim that it should be categorised under the ability models (Salovey & Grewal, 2005). Even though several models of emotional intelligence exist, it has been suggested that the models are complementary rather than contradictory (Palmer et al., 2007). For that reason the researcher will only discuss the two most prominent theories (Salovey & Grewal, 2005), namely the ability and trait models.

The first approach to emotional intelligence is the ability models (Mayer et al., 2004). The most prominent ability model was developed by Salovey and Mayer (2005). Peter Salovey and John Mayer first introduced the term emotional intelligence into the scientific research field. According to them

emotional intelligence is "the ability to perceive, appraise and express emotions; to access and or generate feelings when they facilitate thought; to understand emotion and emotional knowledge; and to regulate emotions to promote emotional and intellectual growth" (Caruso, Mayer & Salovey, 2002, p.306). Other descriptions of emotional intelligence include the relational applicability of emotions between individuals and how this information can be used to guide problem solving and decision making (Mayer, Salovey, Caruso & Sitarenios, 2001).

Salovey and Mayer (1990) divided emotional intelligence into four related abilities: perceiving, using, understanding and managing emotions. This definition combines emotions and intelligence by regarding emotions as vital sources of information. These sources of information in turn can help a person to make sense of and navigate the social environment (Salovey & Grewal, 2005). Salovey and Mayer (1990) proposed an official definition of emotional intelligence as "the ability to monitor one's own and others' feelings, to discriminate among them, and to use this information to guide one's thinking and action" (p. 189).

Perceiving emotions is the most basic aspect of emotional intelligence, because it is the ability to identify and decode emotions in others, as well as identifying one's own emotions (Caruso et al., 2002). Using emotions is the ability to attach emotions to assist various cognitive activities, such as problem solving and thinking. Understanding emotions is the ability to understand emotional language and to realise that complicated relationships exist among emotions. Managing emotions is the ability to regulate one's own and others' emotions. This also includes the ability to manage emotions to achieve goals (Caruso et al., 2002; Salovey & Grewal, 2005). Inherent to this ability model is the notion that these emotional skills cannot exist apart from the social and cultural context in which they function. Emotional skills should be used while remaining sensitive to what behaviour other people regard as proper (Salovey & Grewal, 2005).

The second approach to emotional intelligence is the trait models. The most prominent trait model was developed by Reuven Bar-On (Lyusin, 2006). Bar-On's trait model proposed five major conceptual components of emotional and social intelligence. This theory proposes a widely interpreted concept of emotional intelligence (Bar-On et al., 2006). According to Bar-On, emotional intelligence facilitates how a person can successfully handle various life situations (Lyusin, 2006). The model proposes that emotional and social competencies establish how successfully people understand and articulate themselves, how well they can understand and relate with others, as well as manage everyday stress. The model includes intrapersonal components, interpersonal components, adaptability components, stress management components and general mood components (Bar-On et al., 2006).

For the purpose of this research the ability model approach of emotional intelligence by Mayer and Salovey was utilised. Therefore emotional intelligence is defined as "the ability to monitor one's own and others' feelings, to discriminate among them, and to use this information to guide one's thinking and action" (Salovey & Mayer, 1990, p. 189). Thus emotional intelligence is divided into four related abilities: perceiving, using, understanding and managing emotions. This definition combines emotions and intelligence by regarding emotions as vital sources of information (Mayer et al., 2004).

Various methods have been proposed to measure emotional intelligence (Gignac, 2008). Of those methods the researcher will discuss the origin of the measurement that was applicable to this research. Ben Palmer and Con Stough (Palmer & Stough, 2001) developed the Swinburne University Emotional Intelligence Test (SUIET). This test was designed as a 70 item assessment through which an individual and others rated the individual's emotionally intelligent work behaviours. The five common dimensions for emotional intelligence were identified as emotional recognition and expression, emotional management, understanding emotions external, emotional control and emotions direct cognition (Gignac, 2008).

After several research studies had been conducted on the SUIET, Gignac decided that a revision of the SUEIT was needed. A new psychometric assessment known as the Genos EI Inventory was the outcome. This instrument measures seven emotional intelligence dimensions: “Emotional Self-Awareness, Emotional Expression, Emotional Awareness of Others, Emotional reasoning, Emotional Self-Management, Emotional Management of Others and Emotional Self-Control” (Gignac, 2008, p. 17). The results of a confirmatory factor analysis completed on this instrument confirmed a seven-factor model of the emotional intelligence construct (Gignac, 2009). For research purposes, Genos also designed two abridged versions of the EI instrument, namely the concise and short version. The Genos Emotional Intelligence Inventory short version was utilised for this research study (see Section 3.5.4).

The applicability of emotional intelligence within the military environment is of relevance to this research. Two main groundbreaking studies were conducted in the potentially stressful and dangerous military environment (Bar-On et al., 2006). Researchers applied the Bar-On Emotional Quotient Inventory to determine whether there is a relationship between emotional intelligence and performance within the military environment. The United States Air force study was conducted to establish whether the measurement of emotional intelligence can be used to predict performance in military recruits. It was assumed that if recruits’ possible performance in the environment can be correctly predicted due to the assessments, then the escalating high costs of turnover due to mismatches between recruits and the organisation could be reduced. The Israeli Defence Force completed a validity study over a three year period. The aim of this study was to determine whether emotional intelligence assessments can assist in predicting performance in the military as well as whether it can predict possible leadership potential (Bar-On et al., 2006).

The results of the military studies established that emotional intelligence for high performers was significantly higher than that of low performers. The four emotional and social competencies of assertiveness, impulse control, stress

tolerance and flexibility within the emotional intelligence model predicted the profile of a successful combatant most accurately. It also purported that, within the sample, 30 percent of the variance in the performance of the combat soldiers can be accounted for by emotional intelligence. Recruiters can also use an assessment of emotional intelligence to identify recruits that will be able to deal successfully with highly stressful conditions and potentially lethal environments. Emotional intelligence also predicts the leadership potential of military members. Thus a significant relationship exists between emotional intelligence and occupational performance (Bar-On et al., 2006). Other research also indicated significant relationships between emotional intelligence and mental health, psychosomatic health and physical health (Schutte, Malouff, Thorsteinsson, Bhullar & Rooke, 2007).

Applying the knowledge gained from these studies and testing it within a South African environment in general and the military in particular is therefore crucial. Several researchers have concluded that not enough research on the utility of emotional intelligence has been conducted (Palmer, Stough, Harmer & Gignac, 2009). Therefore this research attempts to contribute to this research gap. It is vital to understand how the assessment of emotional intelligence can also benefit the South African military as well as organisations in general. If a soldier can apply the four quadrants of emotional intelligence, this can benefit the organisation. A soldier that can understand and manage his own emotions, as well as recognise and manage other people's emotions, can adjust better to the military environment and be a better soldier.

2.4.2 Locus of control

Locus of control is one of the person variables that could play a role in a person's adjustment to his or her work environment. Perceived control has been extensively examined in the psychology literature in a variety of forms (Averill, 1973; Furnham, 2005). More than 100 constructs have been identified that shared the notion of control, for example mastery, helplessness and action control (Anderson, Hellriegel & Slocum, 1997). Control beliefs draw so much attention in research because they are associated with a

variety of cognitive, affective, behavioural and physiological outcomes (Anderson et al., 1997; Bandura, 1986; Bandura, 2001; Lefcourt, 1982). A study regarding work outcomes and locus of control found that locus of control was related to several important criterion variables, including coping behaviour, job attitudes, job performance, employee well-being, withdrawal intentions, withdrawal behaviour, interpersonal relationships at work and perceptions of the work environment (Wang, Bowling & Eschleman, 2010).

Locus of control has its origins in Julian Rotter's social learning theory. Rotter (as cited in Pfeiffer), stated "(a) that a person was more likely to behave in a certain way if he or she expected that the behaviour would result in a desired or positive outcome (reinforcement) and (b) if the reward or reinforcement had a high value to the person" (Pfeiffer, 2003, p. 32). Locus of control can be defined as "the ways in which individuals attribute responsibility for events to factors within themselves and within their control or to factors outside their control" (Pfeiffer, 2003, p. 32). Locus of control also refers to "whether or not people believe they are in control of reinforcements in their life" (Spector, 2000, p. 211). This concept is based on the degree to which people perceive the eventuality that certain outcomes will result from specific reasons or actions (Wang et al., 2010).

Within the theory of locus of control, a distinction is made between internal and external locus of control. Rotter was the first to differentiate between internal and external locus of control. Internals are those who believe that they are the masters of their fate and, therefore, often are confident, alert and directive in attempting to control their external environments (Pareek, 2003). Further, they often perceive a strong link between their actions and consequences. Externals are those who believe that they do not have direct control of their fate and perceive themselves in a passive role with regard to their external environment. They tend to attribute personal outcomes to external factors or luck (Pareek, 2003).

Locus of control can be described as a personality characteristic that distinguishes between people who see the control of their lives as coming

from inside themselves as being internalisers and those people who believe that their lives are controlled by external factors are externalisers (Gibson, Ivancevich & Donnelly, 2000; Spector, 2000). “People who believe that they control reinforcements are termed internals. People who believe that fate, luck or powerful others control reinforcements are termed externals” (Spector, 2000, p. 211). Internal locus of control refers to the “perception of events, whether positive or negative, as being a consequence of one’s own actions and thereby potentially under personal control” (Lefcourt, 1982, p. 35).

The locus of control of individuals determines the degree to which they believe that their behaviours influence what happens to them. Some people believe that they are autonomous – that they are masters of their own fate and bear personal responsibility for what happens to them. These people are what Rotter termed internals (Gibson et al., 2000). Individuals with a high internal locus of control believe that events are a direct result from their own actions and behaviour. Individuals with high external locus of control believe that powerful others, fate or chance primarily determine events (Singh & Dubey, 2011).

The utility of locus of control within the work environment is relevant to this research. Researchers have observed that an individual's locus of control play an important role in the behaviour of individuals at work (Spector, 2000; Strauser & Lustig, 2003). Strauser and Lustig (2003) suggested that locus of control is part of a higher order assessment that people use to define their worth, abilities and skills.

Hammer and Vardi (1981) found that in industrial settings that encouraged personal initiative in career development (personnel policies and promotion practices), internals played a more active role than externals in their career progress. Internals will utilise more precise strategies to get appointed within a specific desired job, will more readily instigate changes between jobs, exert more effort to get the job they covet, will more likely experience promotions, and will regard their career progress as a result of their own personal abilities, competency, knowledge, experience and performance (Hammer & Vardi,

1981). In a study using top executives and actual business behaviour it showed that locus of control is directly related to strategy-making (Miller, Kets de Vries & Toulouse, 1982).

Spector (1982) performed a meta-analysis of the locus of control studies. He found that high levels of perceived internal control were associated with high levels of job satisfaction, commitment, involvement, performance and motivation, as well as lower levels of physical symptoms, emotional distress, role stress, absenteeism, intent to leave and actual turnover. Locus of control is an important predictor with regard to work motivation and productivity (Spector, 1982). Mitchell, Smyser and Weed (1975) conducted a study of 900 employees in a public utility. They found that internally controlled employees were more content with their jobs, more likely to be in managerial positions, and more satisfied with a participative management style than were employees who perceived themselves to be externally controlled. Spector (1982) noted that locus of control is related to motivation, effort, performance, satisfaction, perception of the job, compliance with authority and supervisory style, as well as an important moderating factor between incentives and motivation, satisfaction and turnover. Individuals with an internal locus of control might prefer piece-rate working systems, whereas individuals with an external locus of control might be more satisfied with direct supervision, comply more readily with the demands of coercive supervisors, and be more compliant with social demands (Spector, 1982).

Coleman, Irving and Cooper (1999) found that internal locus of control was associated with affective commitment and external locus of control was associated with continuance commitment. Externals are often dogmatic. Other studies concluded that individuals with high internal locus of control will have more cognitive abilities that enable them to cope with different assignments and situations. They will also be more open to experience and willing to learn about their new environments (Pareek, 2003).

Internals have been found to be more satisfied with their jobs than externals. It is hypothesised that one reason for the higher satisfaction of internals is

their higher job performance. Individuals who perform better might be better rewarded and thus like their jobs better. Personality might also be related to job choice. Individuals with certain personality traits choose better jobs and therefore have higher satisfaction (Spector, 2000). Thus a person can control the outcome of events through their own behaviour. Various studies since the middle 1960s have revealed results supporting the fact that instrumentalism (internal locus of control) is a cause and a consequence of success and fatalism is a cause and consequence of failure. Results show that instrumentalists (internals) should be more satisfied in their jobs than fatalists (externals). There is sufficient evidence that high internal scores on the Rotter locus of control scale are good predictors of occupational success (Furnham, 2005).

Research on locus of control has revealed that internalisation plays a role in the learning process. When compared to external individuals, internals have been reported as being more sensitive to new information, more observant and more likely to attend to cues that help resolve uncertainties. Internals are also more probable to both acquire intentional and incidental learning. Internals are also more likely to persevere with tasks than externals (Pareek, 2003). A South African study examining the relationship between locus of control and optimal experience (flow) in conducting study or work activities indicated that more experiences of flow are positively correlated with autonomy and internal locus of control. Thus internals will more likely choose autonomous jobs and experience more optimal performance (Taylor, Schepers & Crous, 2006).

Research on individuals with an external locus of control has concluded that externals display more defensiveness as a result of recalling negative information and rationalisation for their behaviours. On a pathological note, external locus of control has been associated with conditions such as schizophrenia and depression (Pareek, 2003). A study in Northern Ireland among fire-fighters revealed that greater psychological distress was related to external locus of control and greater avoidance coping (Brown, Mulhern & Joseph, 2002).

Locus of control was powerfully correlated with many strategic variables, but shown to be mediated by the organisation's structure and the business environment. In a study done by Baumgartel, Reynolds and Pathan (cited in Statt, 2004) it was found that managers with a high need for achievement and internal locus of control, who worked in an organisation that favoured training and the application of new knowledge, were the most effective managers. Research also suggests that internals are likely to display higher intrinsic motivation, be more success orientated and display fewer turnover intentions. Internals who are contemplating leaving the organisation will most likely act on this intention because they believe that they are in control of their destiny (Allen et al., 2005).

Locus of control is a “relatively well-established influence on how well employees perceive their situations and whether or not they experience stress as a result” (Singh & Dubey, 2011, p. 44). Externals might experience higher levels of stress in response to a difficult situation than internals. They also tend to believe that they cannot influence their future outcomes, which result in motivational, emotional and cognitive deficits, which in turn stop the individual from reaching his or her full potential (Singh & Dubey, 2011). Research in the South African context also implied that external locus of control is related to higher levels of job insecurity, while internal locus of control is related to lower levels of job insecurity (Bosman, Buitendach & Rothman, 2005). Adapting the work of Jarvis (2005) regarding the attribution theory to the work environment, it can be postulated that supervisors and subordinates can identify individuals who make unhelpful attributions of their successes and failures and work with them to alter these attributions to be more positive, then individuals can improve their motivation.

The theory of locus of control influences a person's adjustment to his or her work environment (Feij et al., 1999). The importance thereof is emphasised by Moos (1987) who concluded that individuals with higher internal locus of control will attempt to change their work environment if there is poor person-environment fit. In support Feij et al. (1999) observed that individuals with

high levels of internal control experience competency and will actively participate in changing their work environment. Locus of control has been found to be an important predictor of the adjustment of expatriates (Lii & Wong, 2008) and individuals with higher internal locus of control who will have higher levels of personal adjustment (Hjelle, 1976).

Within the military environment the effect of locus of control as part of personality has been investigated (Al-Turkait & Ohaeri, 2008; Bradley, Nicol, Charbonneau & Meyer, 2002; Bradley & Nicol, 2006). A study conducted on the Canadian Forces officer candidates participating in the Basic Officer Training Course concluded that measures of personality are associated with leadership development within the military. Specifically, the final grade obtained by the officer candidates as well as the instructors' ratings of their leadership behaviour were predicted by the candidates' self-ratings of their level of internal locus of control (Bradley et al., 2002).

In a later study by Bradley and Nicol (2006) on officer cadets at the Royal Military College of Canada undergoing military occupation training concluded that locus of control acted as a significant predictor for the final grade received by the cadets on completion of the summer military training. Participants with a high internal locus of control may not feel overwhelmed by the situation and may be more motivated to work hard because they believe there is a direct relation between their personal effort and their performance evaluation. Participants with a low internal locus of control may feel a disconnection between their efforts and performance, especially in a training environment where individuals are continually subjected to unfamiliar situations, unfamiliar equipment, and unfamiliar theory (Bradley & Nicol, 2006).

For the purpose of this research locus of control is described as a personality characteristic that distinguishes between people who see the control of their lives as coming from inside themselves as being internalisers and those people who believe that their lives are controlled by external factors are externalisers (Gibson et al., 2000; Spector, 2000). The Work Locus of Control scale designed by Spector (1988) was utilised to assess this construct (see Section 3.5.5).

Therefore, whether a member has an internal or external locus of control can influence their behaviour and performance within the military environment. The locus of control construct is a personality variable influencing the individual and how he/she will respond to the military environment. The magnitude of this influence on their adjustment within the military environment will be one of the focus areas of this research.

2.4.3 Self-efficacy

The construct of self-efficacy forms part of the social cognitive theories (Luszczynska, Scholz & Schwarzer, 2005). The social cognitive theories emphasise the importance of the roles of thinking and social learning in the explanation of behaviour (Huffman, 2007). The most well-known theory is the social cognitive theory of Albert Bandura. Bandura's theory describes psychosocial functioning through a causal model of three folded reciprocation. The three components are (1) cognitive, affective and biological events, (2) behavioural patterns and (3) environmental events. These components all interact and influence each other (Bandura, 1999).

This theory follows an agentic viewpoint to human self-development, adjustment and change in which people function as anticipative, rational and self-evaluating proactive controllers of their inspiration and actions (Bandura & Locke, 2003). Accordingly, individuals are "agentic operators in their life course, not just onlooking hosts of brain mechanisms orchestrated by environmental events" (Bandura, 1999, p. 22). "To be an agent is to intentionally make things happen by one's actions. Agency embodies the endowments, belief systems, self-regulatory capabilities and distributed structures and functions through which personal influence exercised, rather than residing as a discrete entity in a particular place" (Bandura, 2001, p. 2).

Bandura regards self-efficacy as the foundation for human agency (as described above). "Unless people believe that they can produce desired effects by their actions they have little incentive to act or persevere in the face of difficulties. Whatever other factors serve as motivators, they are rooted in

the core belief that one has the power to produce changes by one's actions" (Bandura, 1999, p. 28).

Self-efficacy can be defined as "the conviction that one can successfully execute the behaviour required to produce the outcomes" (Bandura, 1977, p. 193). Self-efficacy is the extent to which an individual believes he or she can perform the required behaviour under any circumstance (Arnold, Robertson & Cooper, 1991; Reece & Brandt; 2005). Self-efficacy also includes the individual's conception of their confidence to perform tasks (Reece & Brandt; 2005). Thus the feeling of individual control and mastery is at the heart of the self-efficacy approach to psychological adjustment (Maddux & Lewis, 1995).

According to Arnold et al. (1991) self-efficacy is often a good predictor of behaviour. Self-efficacy beliefs regulate human functioning through cognitive, motivational, affective and decisional processes (Bandura & Locke, 2003). Self-efficacy mediates the relationship between what individuals think and their behaviour and the belief in their ability to accomplish things (Swanson & Fouad, 1999). Perceived self-efficacy helps determine individuals' willingness to initiate specific behaviours, as well as perseverance and emotional reaction when facing conflict and obstacles (Cinamon, 2006). Self-efficacy is also the estimation by an individual of his ability to cope, perform and be successful (Judge & Bono, 2001).

The question can arise as to whether locus of control and self-efficacy are the same concept. Sappington (1989) is however of the opinion that they clearly are two separate constructs and gives an explanation as to why the constructs are not identical. The first distinguishing fact is that an individual's locus of control specifies the belief that he controls his rewards through his own behaviours. Another difference between the constructs is that "locus of control usually refers to a very general belief that any of several behaviours within your power to perform could earn you rewards. Self-efficacy refers to a specific belief that you are or are not able to perform a particular behaviour" (Sappington, 1989, p. 91). Therefore, within the scope of this research locus of control and self-efficacy have been treated as two different concepts.

The social cognitive theory of career choice and development has supported varying research programmes with special focus on the function of perceived self-efficacy in occupational choice. Findings from such studies help to elucidate the effect of self-efficacy beliefs on decisional behaviour. Individuals with higher perceived self-efficacy will be more likely to broaden their options for career choices, as well as staying longer within that career once a decision on a career path has been made (Bandura & Locke, 2003). Thus individuals with higher perceived self-efficacy will adjust more readily to their selected work environment because they believe that they can do the job. In other research, self-efficacy beliefs have been found to be directly related to career interests and goals (Ferry et al., 2000).

Individuals with low self-efficacy expectations would probably avoid circumstances in which they feel unable to cope. They will rather look for circumstances which they feel that they will be able to handle. Persistence in displaying behaviours that will be deemed to generate the expected outcomes is also affected by efficacy expectations. Individuals who have high levels of efficacy expectations will be more likely to persevere with behaviours when they encounter difficulty. They will be more likely to carry out the behaviour successfully. This in turn increases their efficacy expectations even more (Bandura, 2002). Individuals with higher levels of self-efficacy will devote themselves to successfully completing tasks (Bandura, 1988). They will also experience less negative emotions in threatening situations and feel more competent in taking control of the situation (Luszczynska et al., 2005). They also believe that they are able to overcome difficult situations and will focus on the opportunities that are presented (Bandura, 2002).

The counter claim can thus also be made. Individuals with low levels of self-efficacy will be more likely to stop displaying specific behaviours once those behaviours become difficult. This will in turn reinforce their already low efficacy expectations (Strauser, 1995). Individuals with higher levels of perceived self-efficacy will exude more positive thinking, have a better self-esteem and set higher goals for themselves. They will experience more positive emotions than individuals with low levels of perceived self-efficacy

(Karademas, Kafetsios & Sideridis, 2007). Self-efficacy has been applied to a variety of fields, including career decisions, career and vocational behaviours (Cinamon, 2006), career choice and performance (Bandura & Locke, 2003; Strauser, Ketz & Keim, 2002). Research by Gibson and by Jex and Bliese (as cited in Van Mierlo, Rutte, Vermunt, Kompier & Doorewaard, 2006) indicated that self-efficacy affects preferences for different types of jobs and work environments. Based on the findings of their research, Whyte and Saks (2007, p. 39) concluded that “people do not usually initiate courses of action unless they believe they can succeed. High self-efficacy should therefore lead to the undertaking of personal responsibility for initiating a specific course of action”.

Self-efficacy refers to perceptions regarding ability to complete a task. “Self-efficacy is not synonymous with self-esteem, although they impact one another. Self-esteem is an emotional experience, describing the extent to which we like ourselves. It is also a global experience – our self-esteem is fairly constant across a range of situations. By contrast, self-efficacy exists within the cognitive domain, describing our beliefs rather than feelings, and is specific to particular situations” (Jarvis, 2005, p. 127).

Self-efficacy also acts as a predictor of successful work and career adjustment (Griffin & Hesketh, 2003; Von Kirchheim & Richardson, 2005). Self-efficacy can be used on two levels to help individuals adjust. On the individual level a person with high self-efficacy beliefs would appear to be more successful to adjust to a new or stressful work environment. On the organisational level accurate assessment of self-efficacy could lead to identifying individuals with the greatest probability of adjustment (Von Kirchheim & Richardson, 2005). Well-adjusted individuals have been found to have higher levels of self-efficacy (Scott & Judge, 2009) and higher levels of well-being (Bandura, 1977; Karademas et al., 2007). Maddux and Lewis proposed that self-efficacy levels influence psychological adjustment through its “impact on goal-setting and persistence, cognitive efficiency and emotional adaptiveness” (1995, p. 43).

Results from a study conducted by Griffin and Hesketh (2003) indicated that self-efficacy for proactive and tolerant adaptable behaviour was related to adjustment. The higher the level of self-efficacy, the better individuals adjusted to their environments (Griffin & Hesketh, 2003). A study conducted by Strauser et al. (2002) examined the relationship between self-efficacy, locus of control and work personality. In the context of this study, work personality forms part of the work adjustment concept. Results indicated that individuals with internal locus of control and high self-efficacy beliefs adjusted more readily to their work environments (Strauser et al., 2002).

Developments in self-efficacy research include the possible relationship between self-efficacy and the adjustment of expatriate employees in their host countries (Johnson et al., 2003; Von Kirchheim & Richardson, 2005). Expatriates with higher self-efficacy are committed in acquiring the appropriate behaviours required by their host countries to be successful. This is done through their process of work adjustment. These expatriates are also less likely to become disheartened and quit their assignment (Von Kirchheim & Richardson, 2005). Individuals with higher levels of self-efficacy will also engage in appropriate interpersonal and social skills within the work context (Keim & Strauser, 2000).

Individuals with higher levels of self-efficacy will also persist longer and be more committed to situations than individuals with lower levels of efficacy (Bandura, 2002). They will also plan more thoroughly and engage work with a fighting spirit to facilitate their successful adjustment (Luszczynska et al., 2005). Individuals with higher levels of self-efficacy will be more prepared to change their behaviours within the work situation and learn new skills and behaviours where needed. They will thus be able to adjust successfully to new work environments (Von Kirchheim & Richardson, 2005).

The role of perceived self-efficacy within the military environment should be evaluated. During a study conducted in the United States Army during the Special Forces Assessment and Selection course, where the participants were 380 male soldiers who voluntarily enrolled in the course, results

indicated that self-efficacy had a significant direct effect on the programme outcome. Soldiers who voluntarily withdrew from the course were lower in self-efficacy than the soldiers who completed the course. Similarly, the soldiers who dropped out for other reasons were also soldiers with lower levels of self-efficacy (Gruber, Kilcullen & Iso-Ahola, 2009). Soldiers who perceive their military service as a positive experience may be less likely to have negative attributions and low levels of self-efficacy, which in turn is associated with poor post-traumatic coping and adjustment (Skopp et al., 2011).

According to the theory of self-efficacy, this belief can also be transferred across situations. Within the military environment work often has to be completed in dangerous contexts, and how leaders behave within that dangerous context can influence the outcome of the situation. Due to the fact that self-efficacy can be transferred across situations, leaders can be prepared for dangerous contexts in general and then leaders can adjust to similar but equally dangerous contexts when in the battlefield (Samuels, Foster & Lindsay, 2010). Research was also conducted on military participants on a Freefall Parachuting course. This course required personal mastery to overcome substantial perceived risk. This research focused on whether self-efficacy beliefs can be developed through a course. The findings concluded that all successful participants had a higher level of self-efficacy after the completion of the course (Samuels et al., 2010).

Training and development programmes can be designed to address the development of individuals' self-efficacy (Von Kirchheim & Richardson, 2005). Supervisors and managers can increase employee motivation through recognition and reward systems as well as praise. They can also set specific goals and targets for employees to reach that, when achieved, will enhance self-efficacy (Jarvis, 2005). These goals must be "realistic short-term goals to work towards, they can judge their self-efficacy in relation to them. There is clear evidence that, when used appropriately, setting goals or targets can enhance performance" (Jarvis, 2005, p. 129).

When attempting to increase self-efficacy, it is also important to understand the power of observational learning. Simulations and events can be created to build on employees' abilities in order to "minimise the experience of failure and maximise the experience of success" (Jarvis, 2005, p. 129).

Supervisors and managers can increase employees' self-efficacy through:

1. Informing personnel regarding the purpose of the training. Emphasise that the training provided is to enhance performance and not to identify areas of incompetence;
2. Prior to the training, personnel must understand the purpose of the training as well as receive as much information as practically possible regarding the content of the training;
3. Personnel can be made aware of other individuals or peers in similar posts that are successful after they received training;
4. Learners must receive feedback to understand that learning is under their control. They must believe that they have the abilities to complete the training and it is their responsibility to surmount any challenges occurred during training (Noe et al., 2006).

For the purpose of this research self-efficacy has been defined as "the conviction that one can successfully execute the behaviour required to produce the outcomes" (Bandura, 1977, p. 193). The Schwarzer General Self-Efficacy scale (Jerusalem & Schwarzer, 1993) was utilised to assess this construct (see Section 3.5.6). Due to the fact that situations within the military context can often be highly stressful and life threatening, it is expected that individuals with higher self-efficacy levels will be able to adjust more readily and take control of the situation. It is also assumed that these individuals will be more successful in their tasks or achieve higher levels of mission success. This is therefore one of the hypotheses that this research attempted to answer.

2.4.4 Sense of coherence

Aaron Antonovsky (1993) explained the relationship between life stressors and health with the construct of sense of coherence. Sense of coherence relates to the field of salutogenesis. The focal point of Antonovsky's research was the search for factors that keep people healthy, especially those in challenging circumstances, as opposed to focusing on reasons for poor health. His theory has been widely adopted in research on health and well-being (Klepp, Mastekaasa, Sorensen, Sandanger & Kleiner, 2007). Sense of coherence has been described as "a dynamic aspect of the personality that is formed throughout childhood and adolescence, and can be viewed as a stable dispositional orientation. It is believed to be a construct that is universally meaningful, cutting across lines of gender, social class, region and culture" (Muller & Rothmann, 2009, p. 90).

The primary definition of sense of coherence is provided by Aaron Antonovsky. Sense of coherence is defined as "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement. These three components are called comprehensibility, manageability and meaningfulness" (Antonovsky, 1993, p. 725).

Muller and Rothmann explained the three components as follows: Comprehensibility refers to "the extent to which one perceives stimuli from the external and internal environments as information that is ordered, structured and consistent. The stimuli are perceived to be comprehensible and make sense at a cognitive level (cognitive component). Manageability refers to the extent to which individuals experience events in life as situations that are endurable or manageable, or even as a new challenge (instrumental component). Meaningfulness refers to the extent to which one feels that life is making sense at an emotional and not simply a cognitive level (motivational

component)” (Muller & Rothmann, 2009, p. 90). If the stimuli are regarded as manageable, it can be regarded as being under the individual’s own control or the control of legitimate others such as spouses, friends, formal authorities, or political and spiritual leaders. Stimuli regarded as being motivating will be accepted as welcome challenges worthy of engaging with and investing oneself in (Strümpfer & De Bruin, 2009).

Antonovsky’s model incorporated the concept of resistance resources. Resources are described as “leading to life experiences which promoted the development of a strong sense of coherence, a way of seeing the world which facilitated successful coping with the innumerable, complex stressors confronting us in the course of living” (Antonovsky, 1993, p. 725). The world is described as an ubiquitous source of prevalent internal and external stressors. These stressors continuously affect individuals and sense of coherence is an attempt to describe the global resistance factor that safeguards individuals against disease and death. The global orientation of sense of coherence describes to what extent the individual regards the world as comprehensible, manageable and meaningful (Klepp et al., 2007).

Sense of coherence is a construct developed to explain the individual’s successful coping with stressors and this in turn will affect the individual’s health and well-being. Health is on a continuum that ranges from ease (health) or disease. The more an individual is able to cope with stressors, the more the individual will move towards the ease (healthy) part of the spectrum. Sense of coherence is described as a global orientation, “a *Weltanschauung*, a dispositional orientation, in which the world is seen, to a greater or lesser extent as comprehensible (the cognitive component), manageable (the instrumental component) and meaningful (the motivational component) (Antonovsky, 1993b, p. 972).

Helen Antonovsky and Sagy interpreted that sense of coherence translates to a generalised method of beholding the world and this viewpoint will stabilise around the age of 30 (Antonovsky & Sagy, 1985). Conversely, Feldt and others are of the opinion that a constant growth in the level of sense of

coherence over time is common during adulthood, irrespective of age. Higher sense of coherence levels instead of age will thus determine the stable development of the individual's sense of coherence (Feldt, Leskinen, Koskenvuo, Suominen, Vahtera & Kivimaki, 2011). Sense of coherence is described as a "personality characteristic or coping style – an enduring tendency to see one's life space as more or less ordered, predictable and manageable" (Antonovsky & Sagy, 1985, p. 214). Thus, sense of coherence will affect an individual's responses within different stressful situations (Antonovsky & Sagy, 1985).

Strümpfer and De Bruin described sense of coherence as a "dispositional orientation that is presumed to engender, sustain and enhance health, as well as to engender strength at other endpoints, such as work" (Strümpfer & De Bruin, 2009, p. 1). Sense of coherence thus refers to an individual's general orientation to life (Muller & Rothmann, 2009). Vastamaki, Paul and Moser described sense of coherence as "a person's central stress resistance resource" and proposes that sense of coherence relates to an individual's continuing feeling of confidence that "things will work out as well as can reasonably be expected, that one will find enough resources to cope with stressful situations, and that life, as such, makes sense and is worthwhile" (2011, p. 100). Cilliers (2011) confirmed that sense of coherence is related to emotional intelligence, managing positive emotions and psychological wellness.

Hence, sense of coherence affects how individuals perceive the situations around them and to what extent they regard them as controllable, meaningful and manageable. It serves as a psychologically based stress-resistance resource. It can thus function as a major contributor to influence an individual's ability to survive or cope with unforgiving events such as war. It can also affect the degree of recovery from traumatic events and the return to normal life after the traumatic experience (Kimhi, Eshel, Zysberg, Hantman & Enosh, 2010).

For the purpose of this research sense of coherence is thus explained and defined as an individual's dynamic perception and feelings of confidence that the environment is predictable and understandable (comprehensibility), that he can control the resources around him (manageability) and that the challenges presented are worthy of engagement and investment (meaningfulness). Sense of coherence will therefore affect an individual's perception of the world around him and whether it is regarded as meaningful, manageable and controllable. The Orientation to Life questionnaire from Antonovsky (1993) was utilised to measure this construct (see Section 3.5.7).

Understanding sense of coherence and the individual differences in the abilities to cope with stress thus leads to the application of the construct within the field of work. Antonovsky proposed that having a strong sense of coherence enables an individual to utilise effective coping resources in the face of stressors. This in turn will supposedly propel the individual towards being healthier. An individual with a weaker sense of coherence will struggle with the management of stressors and be unable to utilise effective coping resources, which can result in poor health (Antonovsky, 1993). Coping strategies are important predictors of the outcomes of stressful situations (Cohen, Ben-Zur, Rosenfeld, 2008). The theory of sense of coherence purports the direct relationship between an individual's level of sense of coherence and his or her ability to utilise various strategies that can result in improved coping, and as a result improve health and well-being (Feldt et al., 2011, p. 70).

Strümpfer and De Bruin described the difference between individuals with stronger and weaker sense of coherence. "A working person with a strong sense of coherence will make cognitive sense of the workplace and will perceive its stimuli as clear, ordered, structured, consistent and predictable information. Such a person will perceive work as holding challenges which she or he can meet by availing both personal resources and those under the control of, for example, managers, co-workers and subordinates. In addition, such a person will make motivational sense of work demands as challenges

that are worthy of engaging with and investing personal energy in” (Strümpfer & De Bruin, 2009, p. 1).

An individual with a strong sense of coherence has a set of fundamental rules. Antonovsky equated these fundamental rules to a canon, such as the Ten Commandments, but the tactics individuals employ are flexible (Antonovsky, 1993b). Thus the manner in which the rules are interpreted and executed can differ between individuals. With a strong sense of coherence an individual will be less likely to perceive various stressful encounters as intimidating and experience less anxiety. Alternately individuals with lower sense of coherence will deem the same encounters as more threatening and will experience more anxiety (Antonovsky & Sagy, 1985).

Stronger levels of sense of coherence can also assist individuals in employing flexible adjustment strategies. These strategies can then be adjusted to fit to the needs of the specific situation (Klepp et al., 2007). Research also indicated that stronger sense of coherence can lead to healthier individuals by means of effective coping strategies and life satisfaction (Posadzki, Stockl, Musonda & Tsouroufli, 2010). The effective managing of the vast number of conflicts in the complex human existence is also facilitated by the growth and preservation of a strong sense of coherence (Antonovsky, 1993b). Higher levels of sense of coherence are also related to emotional stability (Feldt et al., 2011) and predicted more positive outcomes over time such as reemployment or being a student (Vastamaki et al., 2011). Individuals with lower levels of sense of coherence can regard the world as incoherent and confusing (Klepp et al., 2007). They will view the world as “incomprehensible, hostile and absurd” (Strümpfer & De Bruin, 2009, p. 1). They will be less likely to overcome stressful encounters (Klepp et al., 2007).

From the definitions and descriptions above, the question can arise with the reader as to whether or not sense of coherence and self-efficacy are the same construct. According to Antonovsky (1993) the construct of sense of coherence contrasts with “self-efficacy, internal locus of control, problem-oriented coping, the challenge component of hardiness and mastery. These

are strategies hallowed in particular cultures or subcultures, and may well be appropriate to particular stressors. The sense of coherence is, hopefully, a construct (and the items which constitute its operationalization) which is universally meaningful, one which cuts across lines of gender, social class, region and culture. It does not refer to a specific type of coping, but to factors which, in all cultures, always are the basis for successful coping with stressors” (Antonovsky, 1993, p. 726).

Other authors have indicated that sense of coherence, as part of the resiliency construct, is closely related to different coping-related personality constructs such as self-efficacy and dispositional optimism (Feldt et al., 2011). A review of the literature postulates that sense of coherence is inclusive of the related concepts of resilience and hardiness (Kimhi et al, 2010). Antonovsky distinguished between hardiness, self-efficacy and sense of coherence and focused on the manageability component of sense of coherence. “The manageability component of the sense of coherence is defined in terms of the sense that resources are at one’s disposal, not that one is in control of the requisite resources” (Antonovsky, 1993b, p. 972).

A study by Vastamaki et al. (2011) found that self-efficacy and sense of coherence are “conceptually distinct concepts. First, in contrast to self-efficacy, which is a psychological factor often analysed in reemployment research, sense of coherence is a multidimensional construct. Second, sense of coherence is a cross-situational and broad measure of resiliency with instrumental, cognitive and motivational components” (Vastamaki et al., 2011, p. 104). Hence, for the purpose of this research self-efficacy and sense of coherence were regarded as two separate constructs.

Sense of coherence also affects individuals’ reflections on how to cope and adjust to everyday problems that they face (Griffiths, Ryan & Foster, 2011). The work environment also plays a role in shaping a person’s sense of coherence. If an individual can participate in decision making in the workplace, this can create a feeling of being in control and thus enhance sense of coherence. When the individual can participate in the regulation of

his or her work environment, it creates a sense of meaning which enhances sense of coherence (Breed, Cilliers & Visser, 2006). This can lead to productive performance, recognition, reward and promotion which in turn will again enhance sense of coherence (Breed et al., 2006).

Sense of coherence is regarded as a developmental construct that is presumed to remain relatively stable throughout the adult life. But some adjustments in an individual's level of sense of coherence can also be expected (Antonovsky, 1993; Feldt et al., 2011; Hochwalder & Forsell, 2011). Sense of coherence develops with an individual's maturity and growth in life and can result in the individual becoming a more emotionally stable, productive and positive contributor to society (Feldt et al., 2011).

Managers and supervisors can influence the perception of an individual in believing they can handle a challenge based on support and participation. They can also add to the meaning the individual has in what they are doing by "involving them in the goal setting process and to a lesser degree, make the goal specific to enhance comprehensibility for the individual" (Nel, Crafford & Roodt, 2004, p. 54).

Organisations should also focus on extrinsic factors (for example rewards, remuneration and supervision) when managing employees with a low sense of coherence and factors intrinsic to the job for employees with a strong sense of coherence (Muller & Rothmann, 2009). Sense of coherence reflects a person's capacity to respond to stressful situations (Eriksson & Lindstrom, 2005) and traumatic events (Kimhi et al., 2010; Pham, Vinck, Kinkodi & Weinstein, 2010).

According to Gropp, Geldenhuys and Visser (2007) a relationship was found between locus of control, sense of coherence and emotional intelligence under the conglomerate construct of psychological wellness. "This means that there is a relation between individuals' inclination to attribute the control of events to themselves or factors in the external environment, their positive orientation to life crises and ability to react to stressors in a positive manner,

and their ability to regulate and cope with the emotions that environmental demands and pressures evoke” (Gropp et al., 2007, p. 32).

Individuals with a stronger sense of coherence lean towards being better adjusted and more able to make the necessary adjustments in life to ensure an effective, stable and productive existence. Furthermore, individuals who believe that the world is comprehensible, manageable and meaningful “will be more likely to engage in the developmental tasks associated with work adjustment and will have a more positive interaction with their environment. They should, therefore, experience a higher level of work adjustment. Individuals with low levels of sense of coherence will be less likely to engage in the required developmental tasks, will be more likely to have negative interaction with the environment and, as a result, will report lower levels of work adjustment” (Strauser & Lustig, 2003, p. 130).

Sense of coherence has a positive relationship with the individual’s perceived post-traumatic recovery. Sense of coherence also has a negative relationship with stress symptoms. Individuals with higher levels of sense of coherence will more likely experience lower levels of stress symptoms while also having higher levels of perceived post-traumatic recovery after surviving a war environment with all its challenges. Sense of coherence serves as a possible predictor for individuals’ ability to cope with traumatic events, for screening or selecting individuals at risk of being overcome by stressful encounters, or for selecting individuals for special jobs that require high levels of resiliency to severe stress (Kimhi et al., 2010).

From the above literature, the author proposes that members in the military who regard the world around them as making sense, being manageable and with more meaning or purpose, will adjust more readily into the strenuous military environment. This is therefore one of the hypotheses that this research has attempted to answer.

From the above literature review, the work adjustment model has once again been modified for this research. Building on the central components of the

theory of work adjustment, this research adapted the model of Lofquist and Dawis (1969) to the military work environment by proposing the congruence or fit between the person and the environment that can result in the level of adjustment experienced, resulting in different outcomes for the individual and the organisation.

Figure 2.8 is a graphic representation of this adaptation. The person and the environment interact and correspondence or non-correspondence is the outcome. This correspondence determines the level of adjustment experienced by the individual and the work environment. Adjustment can be regarded as a continuum from no or low levels of adjustment to high levels of adjustment. No work adjustment can lead to adjustment disorders. Low levels of work adjustment can lead to not accepting a job, leaving an organisation, low socialisation, low job satisfaction, low motivation and low organisational commitment. High levels of work adjustment can influence attraction to a job, job acceptance intentions, recruitment, selection, tenure, retention, turnover intentions, organisational culture, high socialisation, career

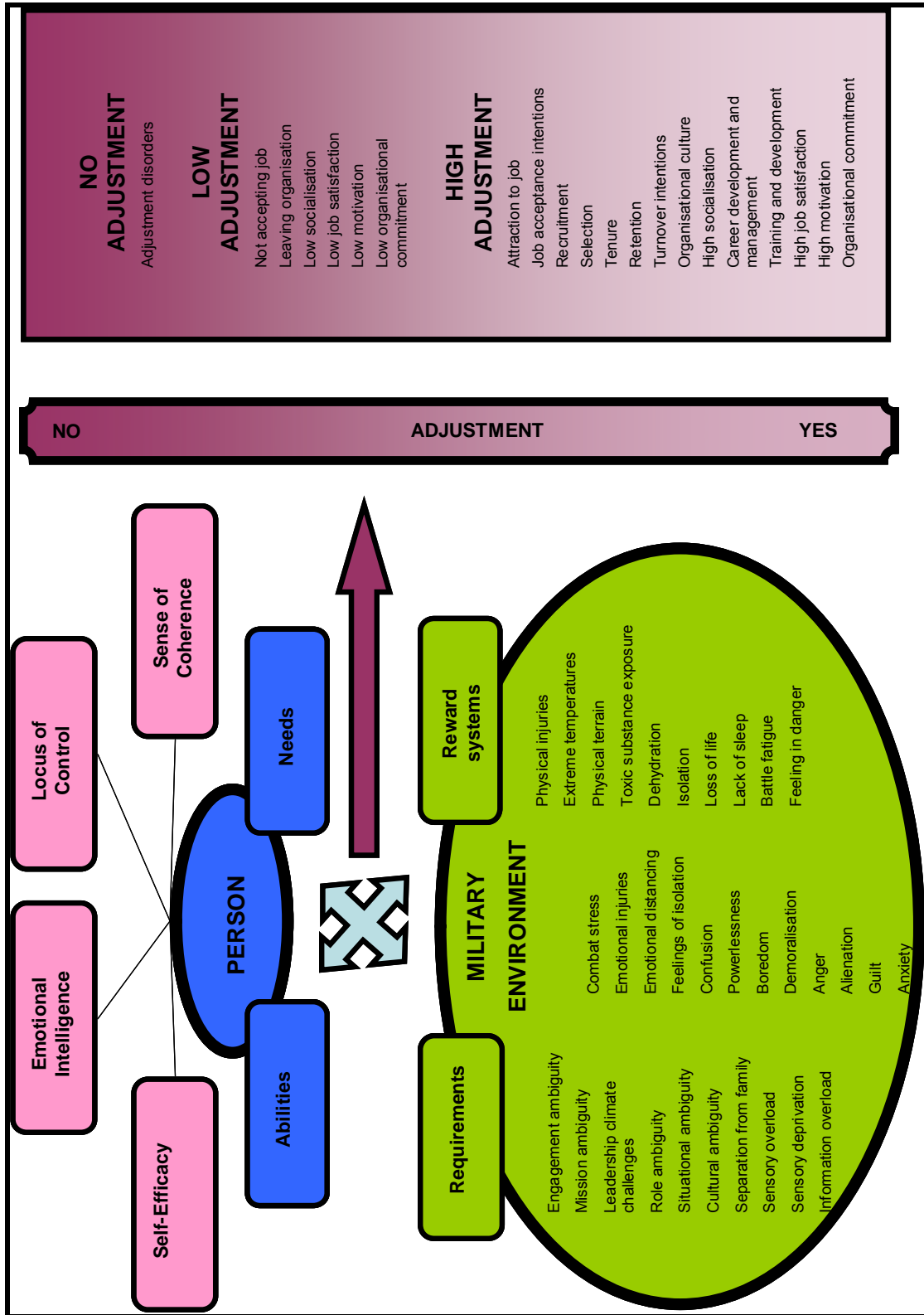


Figure 2.8 Work adjustment within the military environment

development and management, training and development, high job satisfaction, high motivation and organisational commitment.

This concludes the section of the literature review regarding the person variables within the theory of person-environment fit. This section deliberated the constructs of emotional intelligence, locus of control, self-efficacy and sense of coherence.

2.5 CONCLUSION

The literature review reached the following objectives. The first section introduced the concept of adjustment within the work environment to the reader. This included the theory of person-environment fit, the theory of work adjustment, and the distinction between adjustment, adaptation and adjustment disorders. The section concluded with the utility of the person-environment fit theory within the workplace.

The second section accentuated the unique challenges of the military as a work environment. These factors distinguish the military as an employer from civilian organisations. The third section elaborated on the person aspect of the theory of person-environment fit. In this section the following concepts were addressed: emotional intelligence, locus of control, self-efficacy and sense of coherence. The origin, definitions and models were elaborated upon. The applicability of the construct to the military environment and adjustment has also been highlighted. Several hypotheses have been stated.

This concludes the chapter on the literature review. The next chapter will present the research methodology employed in this research.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The previous chapter presented the literature review for this study. The concept of adjustment was introduced within the work environment. The theory of person-environment fit, the theory of work adjustment and the distinction between adjustment, adaptation and adjustment disorders were discussed. The utility of the person-environment fit theory for the workplace was enunciated. The characteristics unique to the military work environment were discussed. The theory and models for the person variables of emotional intelligence, locus of control, self-efficacy and sense of coherence within the context of work adjustment were discussed.

This chapter depicts the statistical hypotheses for this study. The research design that was followed is explained. The research methodology is discussed, including the research variables, population and sample, the sample method and sampling size, the data collection and ethical considerations for this study. The biographical information, measuring instruments and reliability and validity are explained. The chapter concludes with the data capturing and methods used for data analysis.

3.2 HYPOTHESES

The person-environment fit theory has two main components. The work environment for this study was the military work environment. The military work environment and its unique challenges have been explained in the literature review (see Section 2.3). The person variables identified for the scope of this study (see Sections 1.3 and 2.4) are emotional intelligence, locus of control, self-efficacy and sense of coherence. This study has proposed to answer the research problem (see Section 1.3) and satisfy the research objectives (see Section 1.4). From the aforementioned literature

review (see Chapter 2), the following statistical hypotheses were stated for this study:

Hypothesis 1

H₀1: Emotional intelligence does not have a relationship with work adjustment.

H₁1: Emotional intelligence has a relationship with work adjustment.

Hypothesis 2

H₀2: Locus of control does not have a relationship with work adjustment.

H₁2: Locus of control has a relationship with work adjustment.

Hypothesis 3

H₀3: Self-efficacy does not have a relationship with work adjustment.

H₁3: Self-efficacy has a relationship with work adjustment.

Hypothesis 4

H₀4: Sense of coherence does not have a relationship with work adjustment.

H₁4: Sense of coherence has a relationship with work adjustment.

Hypothesis 5

H₀5: Sense of coherence (subscale meaning) does not have a relationship with work adjustment.

H₁5: Sense of coherence (subscale meaning) has a relationship with work adjustment.

Hypothesis 6

H₀6: Sense of coherence (subscale comprehensibility) does not have a relationship with work adjustment.

H₁6: Sense of coherence (subscale comprehensibility) has a relationship with work adjustment.

Hypothesis 7

H₀7: Sense of coherence (subscale manageability) does not have a relationship with work adjustment.

H₁7: Sense of coherence (subscale manageability) has a relationship with work adjustment.

3.3 RESEARCH DESIGN

In the research field two types of studies exist, (1) empirical studies and (2) non-empirical studies (Mouton, 2001). In order to answer the research problem and satisfy the research objectives, this research study followed an empirical research design. The purpose of the research design was to collect empirical evidence that can be interpreted unambiguously for or against the stated hypotheses (Babbie & Mouton, 2001). Three prominent methodological paradigms have been identified in the field of social research, namely the quantitative paradigm, the qualitative paradigm and the participatory action research paradigm. The quantitative paradigm includes surveys and statistical analysis. The qualitative paradigm includes observation and experimental situations. The participatory action research paradigm includes participatory involvement, action and change and encounter dialogue in research (Babbie & Mouton, 2001). This research followed a quantitative research design by utilising measuring instruments and applying statistical analysis to the data obtained.

This research followed a relational approach where the possible relationship between emotional intelligence, locus of control, self-efficacy, sense of

coherence and work adjustment was determined. In particular, correlational research was conducted. In correlational research two different variables are measured or observed for each individual (Gravetter & Wallnau, 2005). Elmes, Kantowitz and Roediger (2012) defined correlational research as allowing “the researcher to determine simultaneously the degree and the direction of a relationship with a single statistic” (p. 134). Correlational research is regarded as an empirical investigation with the aim to identify relations between variables (Rosnow & Rosenthal, 2005). A correlational research design was used for the purpose of this study, whereby two or more variables per individual were measured simultaneously. This research design permitted the researcher to determine simultaneously the degree and direction of a relationship between emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment with a single statistic.

Upon deciding on a research design, it is also important to consider the possible challenges or limitations to the chosen design. One of the challenges facing a researcher utilising correlational research design is causation. Pearl (as cited in Rosnow & Rosenthal, 2005, p. 175) stated that “causality is a notion shrouded in mystery, controversy, and caution, because scientists and philosophers have had difficulties defining when one event truly causes another”. In correlation studies it cannot be concluded that any one factor produces or causes another, because several other factors are likely to vary simultaneously with those factors being measured. “Because correlations can be calculated between any two sets of scores, often even very high correlations are accidental and not linked to one another at all” (Elmes et al., 2012, p. 138). It is important to mention at this point in time that if correlations are discovered in the result (see Section 4.3), this does not necessarily imply causation.

Another challenge facing the researcher is confounding. When factors are varied at the same time it is difficult to determine which factor or factors worked together to create a specific effect, and thus the factors are regarded as confounded (Rosnow & Rosenthal, 2005). “Confounding is inherent in correlational research and leads to interpreting difficulties” (Elmes et al., 2012,

p. 138). To counter the effects of confounding for this research, it was important not to conclude that the presence of a relationship infers causality. Subsequently, relationships have only been reported and other influencing factors must be considered.

Another challenge regarding correlational research is negative relation. Negative correlation indicates that the higher the value of one variable, the lower the value of the other variable. No definite conclusions on the causal direction of a relation between two variables can be established just because the variables are correlated (Elmes et al., 2012).

The advantages of using the correlation method are that it is very useful for suggesting possible relationships and for directing further inquiry. It can also precisely state the degree of relation between two variables. Predictions can thus be made about the approximate value of one variable if the value of the other is known. The greater the correlation, the greater the prediction will be (Elmes et al., 2012).

The descriptive statistical method was applied to collect, sort, organise and summarise the data collected from the sampling group (Gravetter & Wallnau, 2005). Thereafter it was analysed for the existence of any possible relationships, which in turn can evaluate and test the stated hypotheses for the research (Elmes et al., 2012).

This research design is viewed as appropriate for this research, because the researcher wanted to ascertain the possible relationships between the variables. The participants' ratings have been shaped by their past experiences within the military environment, and are now be assessed at a particular point in time to determine the possible existence of relationships.

3.4. RESEARCH METHODOLOGY

According to the research problem and research objectives for a research project, the methodology utilised must be explained (Babbie & Mouton, 2005).

This section explains the research methodology for this research. The explanations include the identification of the research variables, the explanation of the population and sample, the sample method employed, the applicable sample size, the data collection process as well as the ethical considerations that guided the overall process.

3.4.1 Research variables

A research variable is a “characteristic or condition that changes or has different values for different individuals” (Gravetter & Wallnau, 2005, p. 9). According to Rosnow and Rosenthal (2005) a variable is “an event or condition that the researcher observes or measures or plans to investigate that is likely to vary or change” (p, 49). The variables for this research were emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment.

The independent variable “usually consists of two or more treatment conditions to which participants are exposed” (Gravetter & Wallnau, 2005, p. 13). The independent variable is the variable that will presumably influence or change the dependent variable when it changes (Rosnow & Rosenthal, 2005). The independent variables for this research were emotional intelligence, locus of control, self-efficacy and sense of coherence. The dependant variable “is the one that is observed for changes in order to assess the effect of the treatment” (Gravetter & Wallnau, 2005, p. 13). The dependent variable is regarded as the outcome or result in which the researcher is interested (Rosnow & Rosenthal, 2005). Therefore the dependent variable for this research was work adjustment. A graphic representation of the dependent and independent variables for this research is presented in Figure 3.1.

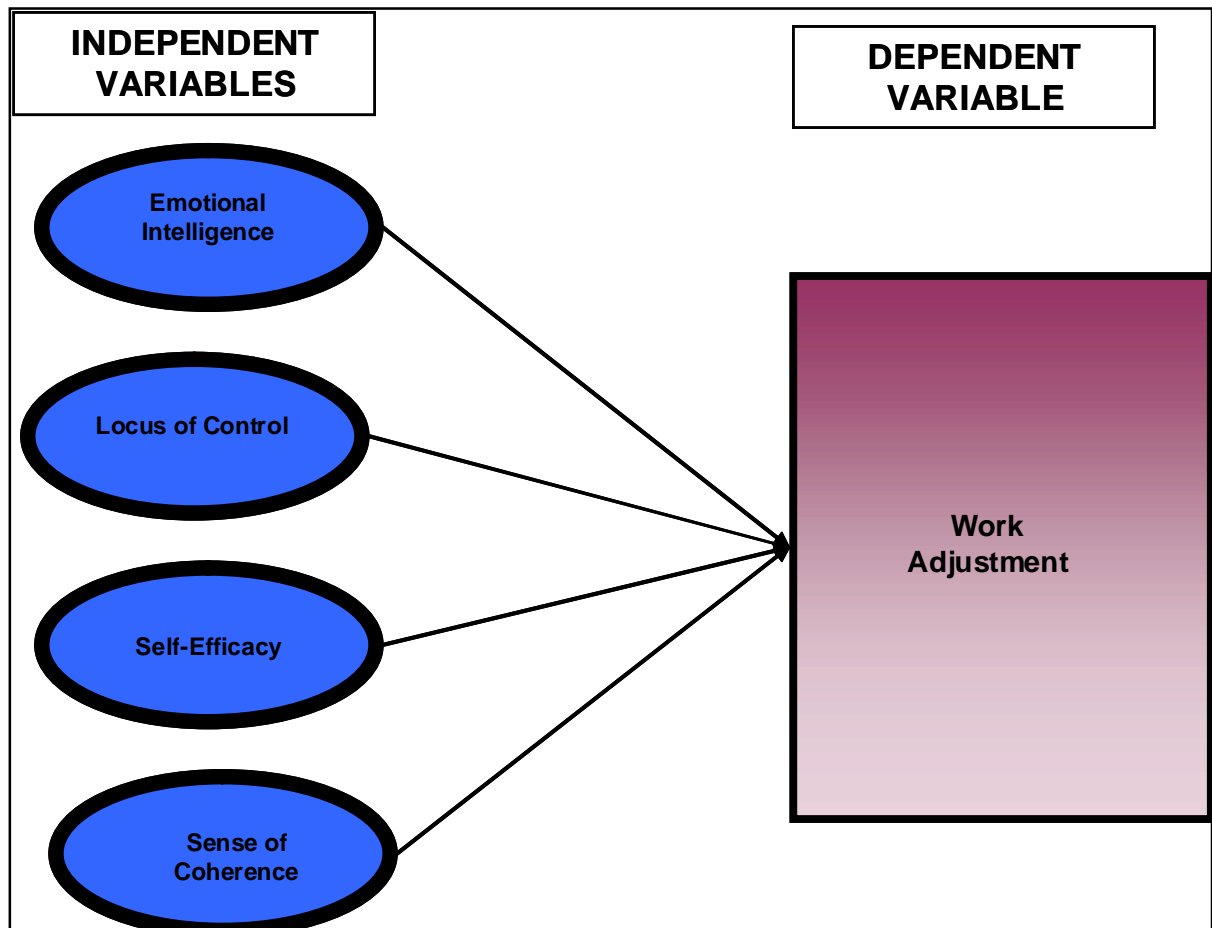


Figure 3.1 Dependent and independent variables

After identifying the dependent and independent variables for this research, the next section explains the population and sampling.

3.4.2. Population and sample

According to Elmes et al. (2012) a population is “the set of measurements (or individuals or objects) to which we want to generalise our findings” (p. 367). The target population for this study was employees of the South African National Defence Force (SANDF). The SANDF employs in the region of 70 000 members within four Arms of Services (SA Army, SA Navy, SA Air Force and SA Medical Health Services). Around 36 000 members serve in the SA Army. Approximately 9700 members are provided annually for deployment by the SA Army to the United Nations, the African Union missions in Africa, border safeguarding responsibilities and internal deployments within the borders of the RSA. The average number of personnel deployed daily in

external operations is 2480 per annum. The annual number of person days utilised during internal operations equals 133036 days (Department of Defence, 2010).

Due to the size of the SANDF and the SA Army, it would be impractical to measure the variables of the entire population. Therefore, only a sample of the population was measured. A sample is a subset of a population, thus it is a smaller grouping of the larger population (Maxim, 1999). The members on pre-deployment at the Mobilisation Centre in Bloemfontein were identified as the sample group for this study. The members were part of the rotation for Operation CORDITE that deploys to Sudan as part of a hybrid African Union and United Nations peacekeeping mission.

3.4.3 Sample method and sample size

For the identification of a smaller sample (to test) of the larger population (SANDF) for the purposes of this research, the non-probability sampling and convenience (or opportunity) method was employed to identify a pre-deployment group (members of Operation CORDITE). A convenient sample includes participants that are conveniently available (Coolican, 2004). Within this pre-deployment group, the probability simple random sampling method was utilised to identify participants. A probability sample is described as the “likelihood of selection for each element in the population must be known (or at least knowable) and nonzero” (Maxim, 1999, p. 108). The sample for this research was drawn using the simple random sampling measure. Maxim (1999) defines this method as “when all the elements and all combinations of elements in the population of interest have an equal probability of inclusion in the sample” (p. 108). External validity is also achieved through random sampling (Elmes et al., 2012). External validity refers to “the extent to which the inferences that are drawn can be generalised to other conditions or populations” (Myers, Well & Lorch, 2010, p. 16). Equivalently, external validity can be defined as “the extent to which one can generalise from the research setting and participant population to other settings and populations” (Elmes et al., 2012, p. 187).

All rank levels and members with different years of work and operational experience within the pre-deployment group were approached to participate in the research. The unit of analysis was collected from 295 members from various corps. Participants in this research included 295 members of the South African National Defence Force. The study population included 226 males (76,6%) and 69 females (23,4%) (see Table 3.1). The majority of respondents (292) were from the South African Army (99%), while the other respondents (3) were from the South African Military Health Service (1%) (see Table 3.2).

Table 3.1

Gender representation

Gender	Participants	Percentage
Male	226	76,6%
Female	69	23,4%
Total	295	100%

Table 3.2

Arms of Service

Arms of Service	Participants	Percentage
SA Army	292	99%
SAMHS	3	1%
Total	295	100%

The age categories of the respondents were: 117 respondents aged between 18 to 24 years (39,7%); 92 respondents aged between 25 to 39 years (31,2%); and 86 respondents were between ages 40 to 60 years (29,2%) (see Table 3.3). The demographics of the respondents looked as follows: 261 respondents (88,5%) African, 29 respondents (9,8%) Coloured, four respondents (1,4%) White and one respondent (0,3%) Indian (see Table 3.4).

Table 3.3***Age grouping***

Age	Participants	Percentage
18-24	117	39,7%
25-39	92	31,2%
40-65	86	29,2%
Total	295	100%

Table 3.4***Demographics***

Demographic	Participants	Percentage
African	261	88,5%
Coloured	29	9,8%
White	4	1,4%
Indian	1	0,3%
Total	295	100%

3.4.4 Data collection

Authorisation for this research was obtained from the Defence Intelligence Division to conduct the research within the SANDF with military members as participants. Authority was also obtained from the Chief of Joint Operations to conduct the research at the Mobilisation Centre situated outside Bloemfontein on a group of SANDF members busy with their pre-deployment mobilisation phase. Structured questionnaires were the main form of data collection. The researcher went to Bloemfontein to administer the questionnaires over a period of three days in December 2012. Each group of participants was introduced to the researcher, who explained the reason for the research, the confidentiality of the data, the anonymity of their responses, withdrawal and voluntary participation. Written informed consent was obtained from all participants before the questionnaires were administered.

The quantitative data collected from the participants was captured electronically and stored for future reference. Each participant completed the

same questionnaires that were bound into one booklet. The cover page consisted of general biographical information from the participants to determine amongst others their Arms of Service, years of service, operational experience, age and gender. The aim of the research as well as confidentiality, withdrawal and voluntary participation was also explained to all participants.

3.4.5 Ethical considerations

For the purpose of this research, all practices and procedures were guided by the ethical guidelines proposed by Stellenbosch University as well as the American Psychological Association (Elmes et al., 2012). Approval to conduct the research was acquired from three institutions: the Stellenbosch University Research Ethics Committee for approval of the research proposal, the Defence Intelligence Division of the SANDF for clearance regarding the security aspects of the research, and the Chief of Joint Operations of the SANDF for authority to submit members of the SANDF to research conditions.

Informed consent to conduct research was obtained in writing from each research participant. Informed consent was obtained after the nature, intent and benefits of the research had been explained to the participants. The participants were also made aware of the fact that they could withdraw their participation at any point in time without fear of prejudice. Confidentiality of the participants was ensured. All questionnaires completed were dealt with anonymously and at no point in time were any of the participants identified during data capturing and reporting.

3.5 MEASURING INSTRUMENTS

When deciding on the measuring instruments utilised in this research, it was also important to elucidate on the reliability and validity of instruments applied in the field of research. This section will converse on the various reliability and validity criteria applicable to the research. Thereafter the various measuring instruments identified will be explained. The measuring

instruments that were used for the purpose of this research included the Organisational Culture Profile revised by Sarros utilised to measure work adjustment (Sarros, Gray, Densten & Cooper, 2005), the Genos Emotional Intelligence Inventory Short Version (Gignac, 2008), the Work Locus of Control Scale developed by Spector (Spector, 1988), the Schwarzer General Self-Efficacy Scale (Jerusalem & Schwarzer, 1993) and the Sense of Coherence Scale (Antonovsky, 1993).

3.5.1 Reliability and validity

Statistical reliability and validity of data can be tested through inferential statistics and establish whether the same results could have been obtained purely by chance or luck (Elmes et al., 2012).

Reliability concerns the “consistency of measures or observations” (Elmes et al., 2012, p. 183). Similarly, Rosnow and Rosenthal (2005) conferred that reliability refers to the consistency or stability of an instrument, but they also expanded their definition to include the implication of dependability of the measuring instrument.

Internal-consistency reliability relates to the “overall degree of relatedness of all items in a test” (Rosnow & Rosenthal, 2005, p. 141). Item-to-item reliability refers to the “reliability of any single item on average” (Rosnow & Rosenthal, 2005, p. 141). Test-retest reliability is the “degree of temporal stability (relatedness) of a measuring instrument or test, or the characteristic it is designed to evaluate, from one administration to another” (Rosnow & Rosenthal, 2005, p. 141). This implies that the same test is administered twice to determine whether the same results are obtained.

Thus reliability is established when the measuring instrument is able to measure the same variables over various administrations of the instrument across various populations and samples as well as on the same sample measured under the same conditions.

Validity refers to “whether a researcher measures or studies what he or she wants to measure” (Elmes et al., 2012, p. 183). Correspondingly, Rosnow and Rosenthal (2005) described validity as “whether a test or measuring instrument actually does what it purports to do. This assessment is considered the most important criterion in instrument construction and, in test and questionnaire construction, involves accumulating evidence in three categories, called content validity, criterion validity and construct validity” (p. 154).

Content validity “means the test or questionnaire items represent the kinds of material (or content areas) they are supposed to represent” (Rosnow & Rosenthal, 2005, p. 154). Criterion validity “has more to do with the statistical aspects of the test, as it refers to the degree to which the test or questionnaire is correlated with one or more outcome criteria (a variable) with which the instrument should be reasonably correlated” (Rosnow & Rosenthal, 2005, p. 155). Construct validity refers “to the extent to which the variables accurately reflect or measure the behaviour of interest” (Elmes et al., 2012, p. 187). Construct validity is regarded as the most important type of validity during questionnaire construction, because it denotes exactly what the instrument will measure (Rosnow & Rosenthal, 2005). Similarly, Shum, O’Gorman and Myers (2006) are of the opinion that “poorly constructed tests have no value for testing theories but well constructed ones do” (p. 92). Construct validity is achieved through operational definitions and protocols (Elmes et al., 2012). For the purpose of this research content validity, criterion validity and construct validity were important, because the instruments had to measure what they were supposed to measure. Therefore the measuring instruments chosen have to ascribe to the validity criteria.

External validity “refers to the extent to which one can generalise from the research setting and participant population to other settings and populations” (Elmes et al., 2012, p. 187). External validity is achieved through random sampling of a sample from a specific population (Elmes et al., 2012). For the purpose of this research external validity was very important, because the results had to be generalised back to the larger population.

3.5.2. Biographical information

A biographical section was included in the questionnaire for each participant to complete. This information was used to gather evidence regarding the biographical characteristics of the participants (including gender, race, age, years of service and Arms of Service⁹).

3.5.3. Work adjustment

The Organisational Culture Profile (OCP) revised by Sarros et al. was used for the purpose of this research. The items are scored on a 5-point Likert scale, ranging from 1 (not at all) to 5 (very much). This instrument measures 28 items on seven factors. These factors are performance orientation, social responsibility, supportiveness, emphasis on rewards, stability, competitiveness and innovation (Sarros et al., 2005). This instrument was developed and validated to assess person-organisation fit (Cable & Parson, 2001; Sarros et al., 2005). This instrument's predictive and face validity has been established through application to an Australian sample of 1918 executives. The seven composite factors substantiated the overall content validity of the instrument. The construct validity of the OCP was confirmed using exploratory factor analysis. The internal reliability of the instrument was established with an acceptable mean Cronbach's alpha coefficient of 0.75 (Sarros et al, 2005). The author is of the opinion that the current research will act as a starting point for research within the South African environment using this instrument.

3.5.4 Emotional intelligence

The Genos EI Inventory Short Version was used for the purpose of this research. The inventory consists of 14 items designed to measure the frequency with which an individual displays emotionally intelligent behaviours on a single dimension. The items are scored on a 5-point Likert scale,

⁹ Arms of Service refer to either the South African Army, South African Navy, South African Air Force or South African Military Health Services

ranging from 1 (almost never) to 5 (almost always). The validation studies for this instrument were conducted on an Australian sample of 11623 reports. Internal consistency reliabilities associated with the total scale scores were approximately 0.95 (Gignac, 2008). The study that conducted factor analysis on the instrument was performed on 4775 participants from countries that included Australia, South Africa, United States of America, Hong Kong, Singapore, India and the United Kingdom (Gignac, 2009). The author is of the opinion that the current research will act as an additive to the research on emotional intelligence within the South African environment using this instrument.

3.5.5 Locus of control

The Work Locus of Control Scale (WLCS) developed by Spector was used for the purpose of this research. The instrument consists out of 16-point Likert scale items with response categories ranging from 1 (disagree very much) to 6 (agree very much) that assesses control beliefs in the workplace. Reliability coefficient alphas for this instrument range from 0.75 to 0.85. Validity has been demonstrated with the WLCS and organisational variables (such as job performance, counterproductive behaviour, organisational commitment and job satisfaction) as well as other locus of control variables. A higher score on the instrument indicates an external locus of control, while a lower score indicates an internal locus of control (Spector, 1988). According to the international norms provided by Spector for the WLCS, three samples for South Africa (with the total number of participants 325), presented a WLCS score of 37.7. This score places South Africa's rating as the second highest internal locus of control per country. The country ranked number one is New Zealand (Spector, 1988).

3.5.6 Self-efficacy

The Schwarzer General Self-Efficacy Scale was used for the purpose of this research (Jerusalem & Schwarzer, 1993). This instrument was designed to assess a general sense of perceived self-efficacy with the aim to predict

coping with daily hassles as well as adjustment after experiencing various kinds of stressful life events. This instrument consists of 10 items, answered on a 4-point Likert scale, ranging from 1 (not at all true) to 4 (exactly true) (Jerusalem & Schwarzer, 1993). In samples from 23 nations the reliability Cronbach's alpha ranged from 0.76 to 0.90, with the majority in the high 0.80 range. Criterion related validity is documented through correlation studies, where positive correlations were found with work satisfaction, dispositional optimism and favourable emotions. Negative correlations were found with burnout, stress, depression, health complaints and anxiety. It can also serve as a predictor of adjustment after life changes and quality of life (Jerusalem & Schwarzer, 1993).

3.5.7 Sense of coherence

The Orientation to Life questionnaire (OLQ) from Antonovsky (1993) was used for the purpose of this research. This instrument was designed to predict the level of an individual's sense of coherence. The 13 item scale was utilised for the purposes of this research. The three factors measured include comprehensibility, manageability and meaningfulness. Items included questions such as 'When you talk to people, do you have the feeling that they do not understand you?' and 'What best describes how you see life'. Each question had a different seven-point semantic differential scale with two anchoring phrases to select as answer, such as 'Never to Always have this feeling' and 'One can always find a solution to painful things in life' to 'There is no solution to painful things in life'. In the studies using the 13 item scale reliability has been established. The Cronbach's alpha measure of internal consistency has been reported as ranging from 0.81 to 0.93. Test-retest reliability found coefficients between 0.41 and 0.97 (Antonovsky, 1993). In a South African sample of 583, Van Schalkwyk and Rothmann (2008) established a Cronbach's alpha of 0.75 for sense of coherence as a one factor construct.

3.6 DATA CAPTURING AND METHODS USED FOR DATA ANALYSIS

The data was collected, captured on Microsoft Excel and stored in a safe and secure place. The coded information was then checked for accuracy. Thereafter the data was analysed using the Statistical Program for the Social Sciences (SPSS) to determine the possible existence of relationships between variables and will result in the testing of the stated hypotheses. The assistance of the Research Department at the Military Psychological Institute and the Centre for Statistics at Stellenbosch University was employed during this process to ensure that the appropriate statistical techniques were utilised for this research. The American Psychological Association (2009) publication manual was consulted for the technical practicalities for this research.

3.7 CONCLUSION

This chapter explained the methodologies employed for this research. The advantages and disadvantages of the correlational research design utilised were discussed. The independent variables for this research were identified as emotional intelligence, locus of control, self-efficacy and sense of coherence. The dependant variable for this research was work adjustment. The population and the sample were identified. The sampling method and sampling size were expressed. The data collection process was explained.

Thereafter the ethical considerations influencing this research were elaborated upon. The various measuring instruments employed were described, including the OCP (Sarros et al., 2005), the Genos EI Inventory (Gignac, 2008), the Work Locus of Control scale (Spector, 1988), the Schwarzer Self-Efficacy scale (Jerusalem & Schwarzer, 2007), and the Orientation to Life questionnaire (Antonovsky, 1993). The statistical data analysis process was also explained.

The following chapter will present the results of the data to the reader. This will include the item analysis, summary statistics, Pearson correlations and regression analysis.

CHAPTER 4

RESULTS

4.1 INTRODUCTION

The previous chapter explained the statistical hypotheses for this study. The research design was explained. The research methodology was discussed, including the research variables, population and sample, sample method and sampling size, the data collection and ethical considerations for the study. The biographical information, measuring instruments and reliability and validity were explained. The chapter concluded with the data capturing and methods used for data analysis.

This chapter presents the different statistical analyses. These include the descriptive statistics, the internal reliability through item analyses and the possible correlations and relationships between the variables through the Pearson correlation coefficient. The results will conclude with the presentation of the results regarding the multiple regression analysis, including the assumptions of multicollinearity and normality.

4.2 DESCRIPTIVE STATISTICS

This section presents the descriptive statistics for this research. Descriptive statistics “describe samples of subjects in terms of variables or combinations of variables” (Tabachnick & Fidell, 1996, p. 9). Thus descriptive statistics is utilised in order to simplify and organise the raw data. The aim of this is to present the data in a summarised format to facilitate manageable results (Babbie & Mouton, 2001; Elmes et al., 2012; Gravetter & Wallnau, 2005; Tabachnick & Fidell, 2001).

Participants in this research included 295 members of the SANDF. The study population, as depicted in Table 3.1, included 226 males (76,6%) and 69 females (23,4%). The majority of respondents (292) were from the South African Army (99%), while the other respondents (3) were from the South African Military Health Service (1%) (see Table 3.2). The age categories of the respondents were: 117 respondents aged between 18 to 24 years (39,7%); 92 respondents aged between 25 to 39 years (31,2%); and 86 respondents were between ages 40 to 60 years (29,2%) (see Table 3.3).

The demographics of the respondents looked as follows: 261 respondents (88,5%) African, 29 respondents (9,8%) Coloured, four respondents (1,4%) White and one respondent (0,3%) Indian (see Table 3.4). The national demographics for the RSA is a total population of 51.8 million people, with 79,8 % African, 9.0% Coloured, 2.5% Indian and 8.7% White (Statistics South Africa, 2013).

The years of service of the respondents were as follow: 73 respondents have one to two years of service (24,7%), 67 respondents have three to five years of service (22,7%), 85 respondents have six to 18 years of service (28,8%) and 70 respondents have 19 years or more of service (23,7%) (see Table 4.1).

Table 4.1

Years of service

Years of service	Participants	Percentage
1-2	73	24,7%
3-5	67	22,7%
6-18	85	28,8%
19 +	70	23,7%
Total	295	100%

The level of education of the respondents were as follow: 56 respondents have a qualification less than Grade 12 (19%), 216 respondents have a Grade

12 qualification (73,2%) and 23 respondents have a certificate or diploma qualification after Grade 12 (7,8%) (see Table 4.2).

Table 4.2
Level of education

Level of education	Participants	Percentage
Less than Grade 12	56	19%
Grade 12	216	73,2%
More than Grade 12	23	7,8%
Total	295	100%

4.3 INTERNAL RELIABILITY ANALYSIS

This section presents the internal reliability analysis. The instruments utilised in this research have been found to have acceptable reliability through prior research (see Section 3.4). This contributes to the current research's reliability. The instruments selected were specifically designed to measure the constructs involved, adding to this research's reliability.

Alpha levels indicate whether the questions of the subscale test the same variable. Item analyses were performed on the different subscales of the instruments to establish the reliability of the scale (Field, 2000). Therefore the aim of item analysis is to identify and eliminate items not contributing to the internal consistency of the instruments. The different subscales were item analysed in order to recognise items that did not contribute to the internal consistency of the scale and then to delete those items if the deletion resulted in higher Cronbach alphas for the scales. The following results were obtained:

- Item 4 ('If employees are unhappy with a decision made by their boss, they should do something about it') of the locus of control (LOC) was flagged as a poor item. The possible reason for item 4 being poor could be that it was a negative item and needed to be reversed scored. The content of item 4 corresponds with the locus of control construct,

but statistically proved to be a poor item. The deletion of the items 4 resulted in the Cronbach alpha increasing from 0.66 to 0.69.

- Item 15 ('Most employees have more influence on their supervisors than they think they do') of the LOC was flagged as a poor item. The possible reason for item 15 being poor could be that it was a negative item and needed to be reversed scored. The content of item 15 corresponds with the locus of control construct, but statistically proved to be a poor item. The deletion of the items 15 resulted in the Cronbach alpha increasing from 0.66 to 0.69.
- Item 14 ('Risk taking') of the OCP (subscale Innovation) was flagged as a poor item. The possible reason for item 14 being poor could be that it was a negative item and needed to be reversed scored. The content of item 14 corresponds with the innovation construct, but statistically proved to be a poor item. Thus, the deletion of the item 14 resulted in the Cronbach alpha for the OCP subscale of INN increasing from 0.43 to 0.53.

The internal reliability of the scales and subscales is presented in Table 4.3 and indicates the Cronbach alphas for all the scales. Thereafter a discussion on the reliability coefficients follows.

According to the results, the different subscales of the OCP, used to measure work adjustment, indicated reliability coefficients of performance orientation (.71), social responsibility (.55), supportiveness (.57), emphasis on rewards (.79), stability (.55), competitiveness (.49) and innovation (.43). The total score for the instrument indicated a reliability coefficient of .91. For the completion of the statistical analysis only the total score for this instrument was utilised. Therefore the reliability coefficient of .91 is acceptable and will be used for further statistical analyses.

The Genos emotional intelligence questionnaire presented a reliability coefficient of .50. The work locus of control scale presented a reliability coefficient of .66. The Schwarcher self-efficacy scale presented a .76 reliability coefficient. These reliability coefficients are acceptable (Field, 2000).

Table 4.3

Internal reliability of scales and subscales

Scale	Cronbach alpha
Organisational culture profile questionnaire	.91
Genos emotional intelligence questionnaire	.50
Work locus of control scale	.66
Schwarcher self-efficacy scale	.76
Orientation to life questionnaire (total)	.72
Comprehensibility	.66
Manageability	.38
Meaningfulness	.28

The total orientation to life scale, indicating sense of coherence, presented a reliability coefficient of .72, with subscales comprehensibility (.66), manageability (.38), and meaningfulness (.28). During the data collection phase the researcher noted that several participants raised questions when completing this questionnaire. The administration of the questionnaire was also explained more than once to participants. Some of the questions were about the marking of the scale. Each question presented the participants with a different scale to measure their answer on. Although the Likert scale remained the same (1 to 7), each question posed a new continuum to answer. For example, question 1 would provide a continuum from 'never' to 'always

have this feeling', question 15 would provide a continuum of 'always confusing and hard to find' to 'always completely clear' and question 17 would provide a continuum of 'full of changes without your knowing what will happen next' to 'completely consistent and clear'.

In a South African study in the military environment (Janse van Rensburg, 2010), this instrument presented a reliability coefficient of .80 with the subscales comprehensibility (.65), manageability (.71) and meaningfulness (.58). In another South African study in the military environment (Grundling, 2012), this instrument presented a reliability coefficient of .69 with the subscales comprehensibility (.64), manageability (.50) and meaningfulness (.53). Even though the reliability coefficient for this sample presented lower on the subscale manageability and meaningfulness than the other two studies, the total score presented acceptable reliability coefficients and was therefore included in the subsequent statistical analyses.

4.4 INFERENCE STATISTICS PEARSON CORRELATIONS

In this section the inferential phase of the analysis of the data is presented. This indicates the estimation of the population parameters and the testing of the hypotheses (Myers, Well & Lorch, 2010). Inferential statistics involves measures to establish the reliability and generalisability of results and indicates whether the differences in results are true and not resulting due to chance (Elmes et al., 2012). The utilisation of inferential statistics enables the researcher to make conclusions and inferences regarding the results by drawing general statements from the sample back to the population (Babbie & Mouton, 2001; Gravetter & Wallnau, 2005; Tabachnick & Fidell, 1996). Testing the hypotheses involves "a set of procedures to determine whether a sample of collected data provides sufficient evidence to reject some hypothesis of no effect in the population, often called the null hypothesis" (Myers et al., 2010, p. 74). Inferential statistics also assist in the confirmation or rejection of hypotheses (Field, 2000).

4.4.1 Correlations

This section presents the results of the research conducted in terms of the correlations as hypothesised in Chapter 3. The relationships between the constructs were analysed by determining the Pearson product-moment correlation coefficient. The Pearson correlation coefficient (r) is described as “a measure of the extent to which two quantitative variables are linearly related” (Myers et al., 2010, p. 443). It “measures the degree and the direction of the linear relationship between two variables” (Gravetter & Wallnau, 2005, p. 415). The Pearson correlation coefficient can indicate the direction (positive and negative) and strength of the correlation (Gravetter & Wallnau, 2005).

Pearson product-moment correlation coefficient values lie between -1 and +1 (Field, 2000; Gravetter & Wallnau, 2005). The value of the coefficient of +1 indicates that the “two variables are perfectly positively correlated, so as one variable increases, the other increases by a proportionate amount. Conversely, a coefficient of -1 indicates a perfectly negative relationship: if one variable increases the other variable decreases by a proportionate amount (Field, 2000; Marczyk, DeMatteo & Festinger, 2005). A coefficient of zero indicates no linear relationship at all and so if one variable changes the other stays the same” (Field, 2000, p. 75).

Effect sizes of correlations indicate the strength of the association between the independent and dependent variables (Rosnow & Rosenthal, 2009; Tabachnick & Fidell, 1996; 2001). According to Cohen (as cited in Coolican, 2004) the definition of effect sizes that should be used to interpret correlations is presented in Table 4.4.

Critique has been reported on the use of effect sizes when interpreting statistics. Cohen’s criteria has been referred to as a “standardised effect size because it is unit free, compared with an absolute effect size” (Lenth, 2001, p. 191). Opposing this view, other statisticians are of the opinion that using Cohen’s criteria to interpret effect sizes is an acceptable and useful statistical

option (Field, 2000; Rosnow & Rosenthal, 2009; Rosnow, Rosenthal & Rubin, 2000).

Table 4.4
Cohen's effect sizes

Effect size	r
Small	0.2
Medium	0.5
Large	0.8

Two advantages to using Cohen's criteria have been proposed: (1) it facilitates the immediate comparison to other research, and (2) it enables researchers to compare effect sizes to other known benchmarks (Thalheimer & Cook, 2002). Therefore the author is of the opinion that it was acceptable to use Cohen's criteria for this research.

Table 4.5
Correlations between the independent variables (emotional intelligence, locus of control, self-efficacy and sense of coherence) and the dependent variable (work adjustment)

Independent variable	Dependent variable	Pearson r	Pearson p-value
EI	OCP	0.15	<0.01
LOC	OCP	-0.27	<0.001
SE	OCP	0.34	<0.001
OLQ	OCP	0.22	<0.001
Clmea	OCP	0.16	<0.01
Ccom	OCP	0.15	<0.01
Cgma	OCP	0.26	<0.001

Notes: n=295; EI=emotional intelligence; LOC=locus of control; SE=self-efficacy; OLQ=sense of coherence; OCP=work adjustment; Clmea=SOC meaning; Ccom=SOC comprehend; CGma=SOC manage

The Pearson correlation coefficients between the independent variable (emotional intelligence, locus of control, self-efficacy and sense of coherence)

and the dependent variable (work adjustment) are presented in the next session (see Table 4.5)

H₁: Emotional intelligence has a relationship with work adjustment.

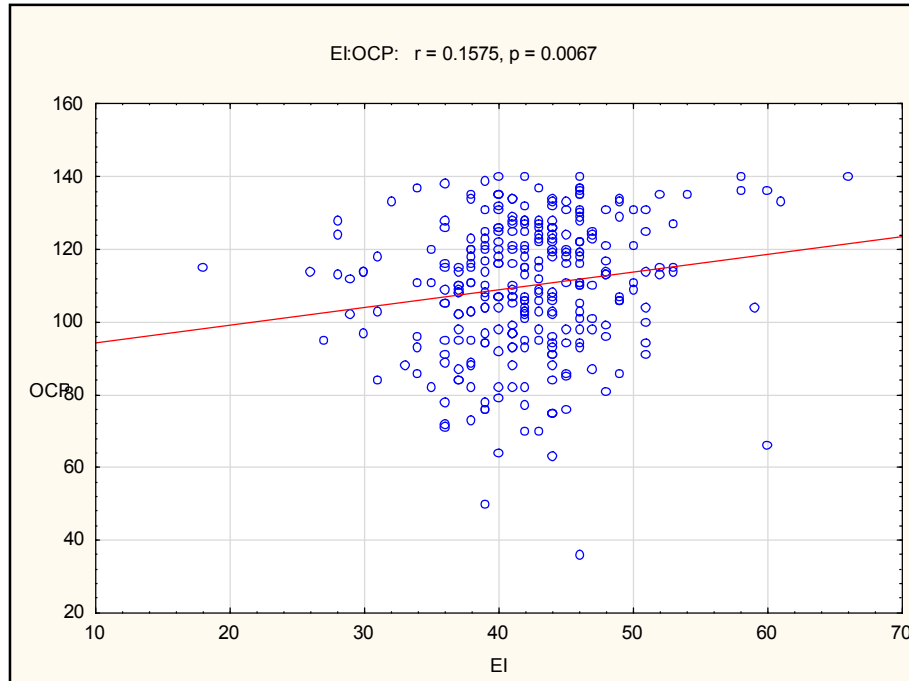
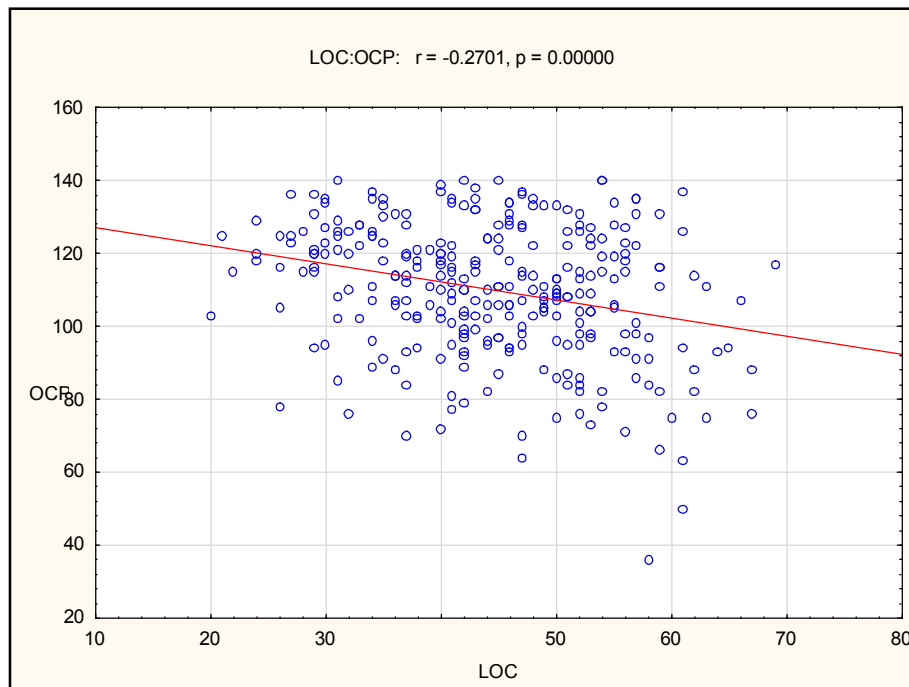


Figure 4.1 The relationship between EI and work adjustment

The returned responses totalled 295 and all were analysed for emotional intelligence and work adjustment. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r=0.15$, $p<0.001$) (see Table 4.5). H_0 is therefore rejected, as emotional intelligence was found to have a small positive relationship with work adjustment.

H₁₂: Locus of control has a relationship with work adjustment.**Figure 4.2 The relationship between LOC and work adjustment**

The returned responses totalled 295 and all were analysed for locus of control and work adjustment. Although the results indicate a statistically significant negative correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is bordering on medium ($r = -0.27$, $p < 0.001$) (see Table 4.5). H_{02} is therefore rejected, as locus of control was found to have a bordering on medium negative relationship with work adjustment.

H₁₃: Self-efficacy has a relationship with work adjustment

The returned responses totalled 295 and all were analysed for self-efficacy and work adjustment. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is medium ($r = 0.34$, $p < 0.001$) (see Table 4.5). H_{03} is therefore rejected, as self-efficacy was found to have a medium positive relationship with work adjustment.

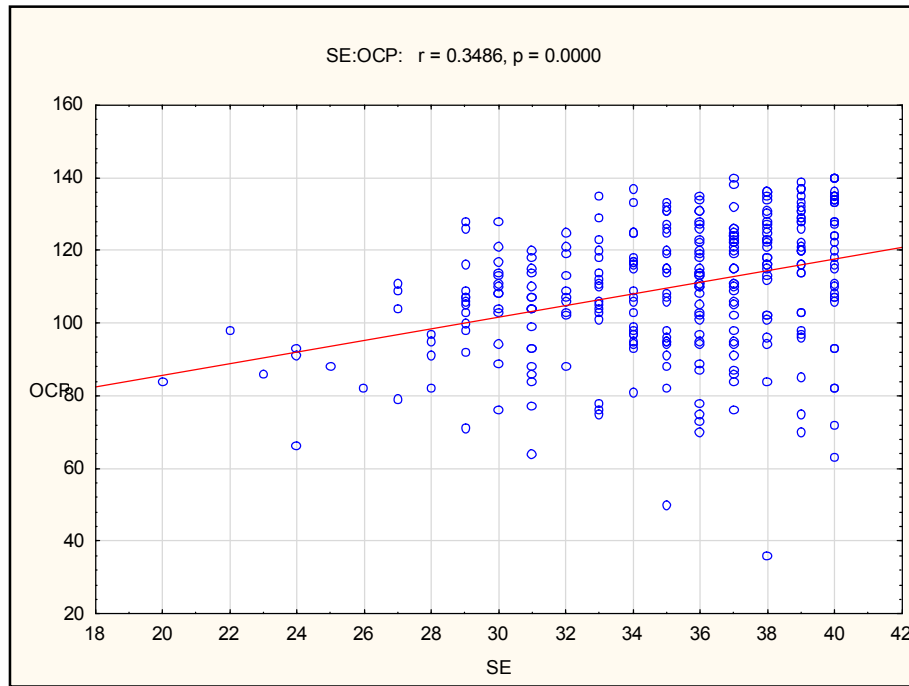


Figure 4.3 The relationship between SE and work adjustment

H₁₄: Sense of coherence has a relationship with work adjustment

The returned responses totalled 295 and all were analysed for sense of coherence and work adjustment. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r=0.22$, $p<0.001$) (see Table 4.5). H₀₄ is therefore rejected, as sense of coherence was found to have a small positive relationship with work adjustment.

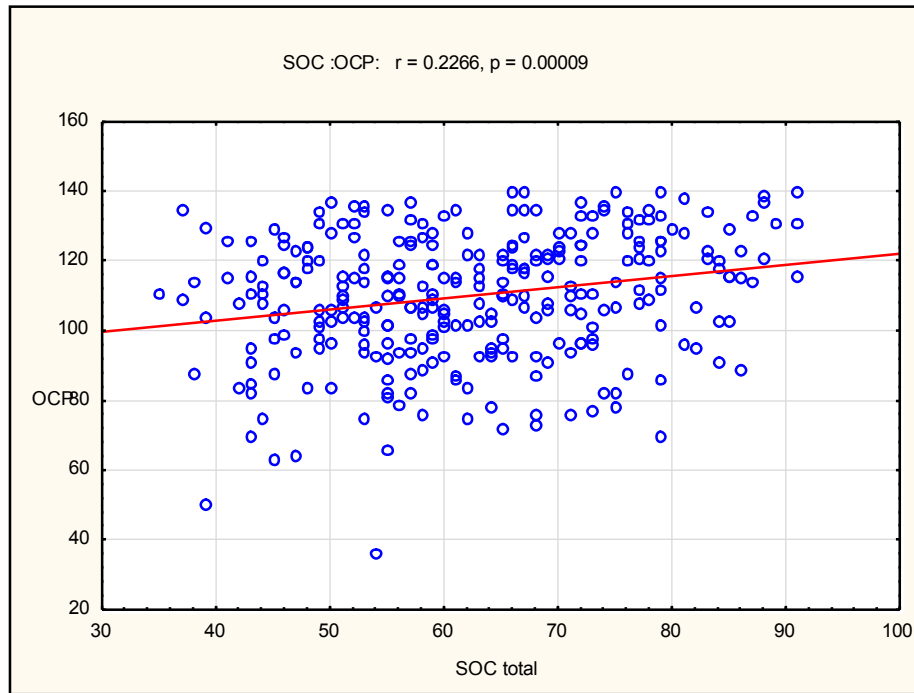


Figure 4.4 The relationship between SOC and work adjustment

H₁5: Sense of coherence (subscale meaning) has a relationship with work adjustment.

The returned responses totalled 295 and all were analysed for sense of coherence (meaning) and work adjustment. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r=0.16$, $p<0.001$) (see Table 4.5). H₀5 is therefore rejected, as sense of coherence (meaning) was found to have a small positive relationship with work adjustment.

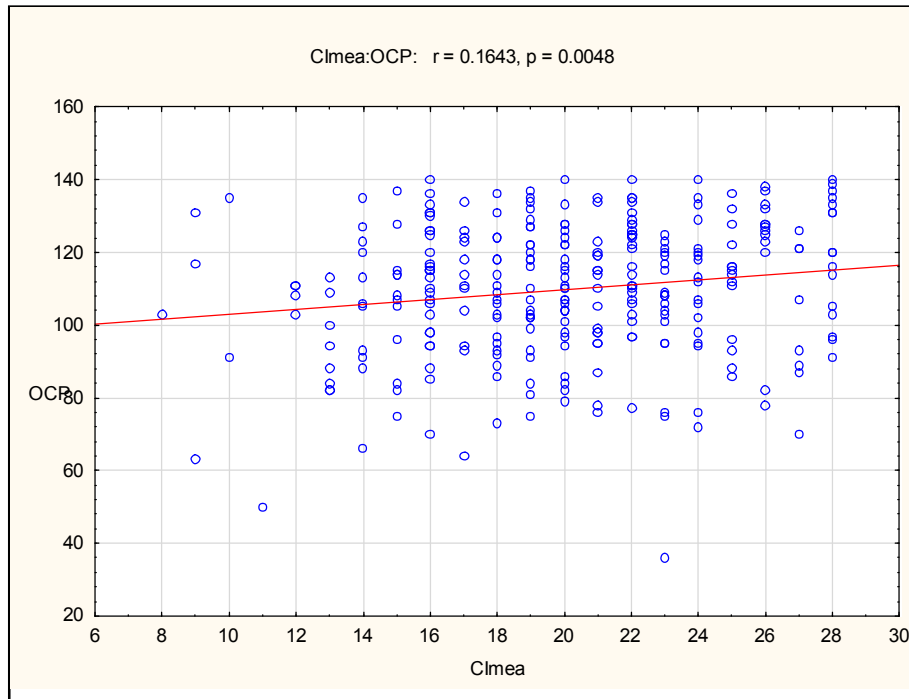


Figure 4.5 The relationship between SOC (meaning) and work adjustment

H₁₆: Sense of coherence (subscale comprehensibility) has a relationship with work adjustment.

The returned responses totalled 295 and all were analysed for sense of coherence (comprehensibility) and work adjustment. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r=0.15$, $p<0.001$) (see Table 4.5). H₀₆ is therefore rejected, as sense of coherence (comprehensibility) was found to have a small positive relationship with work adjustment.

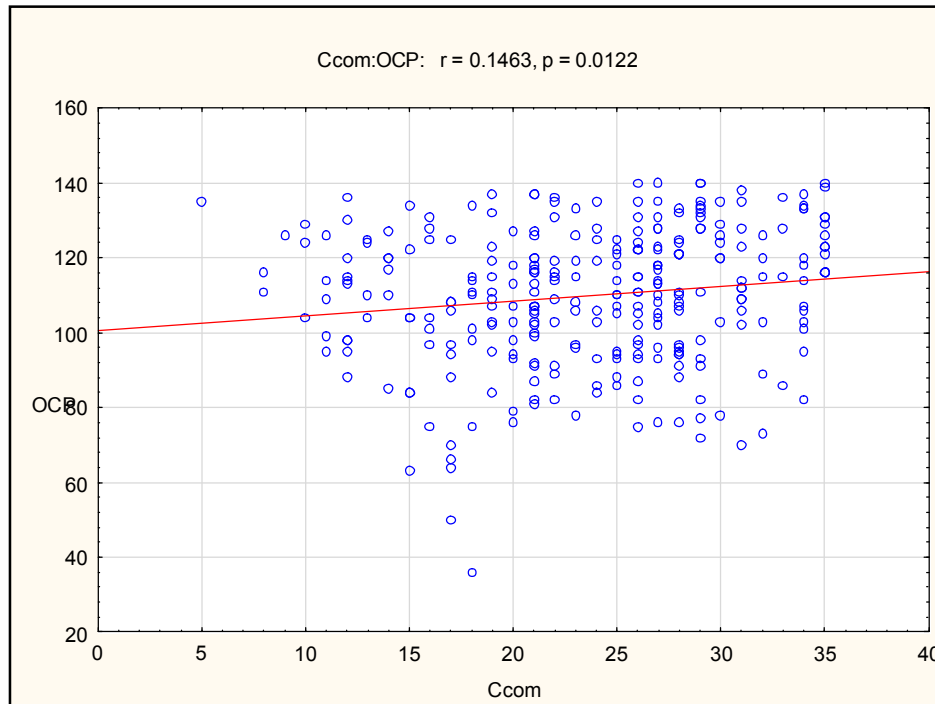


Figure 4.6 The relationship between SOC (comprehensibility) and work adjustment

H₁₇: Sense of coherence (subscale manageability) has a relationship with work adjustment.

The returned responses totalled 295 and all were analysed for sense of coherence (manageability) and work adjustment. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r=0.26$, $p<0.001$) (see Table 4.5). H₀₆ is therefore rejected, as sense of coherence (manageability) was found to have a small positive relationship with work adjustment.

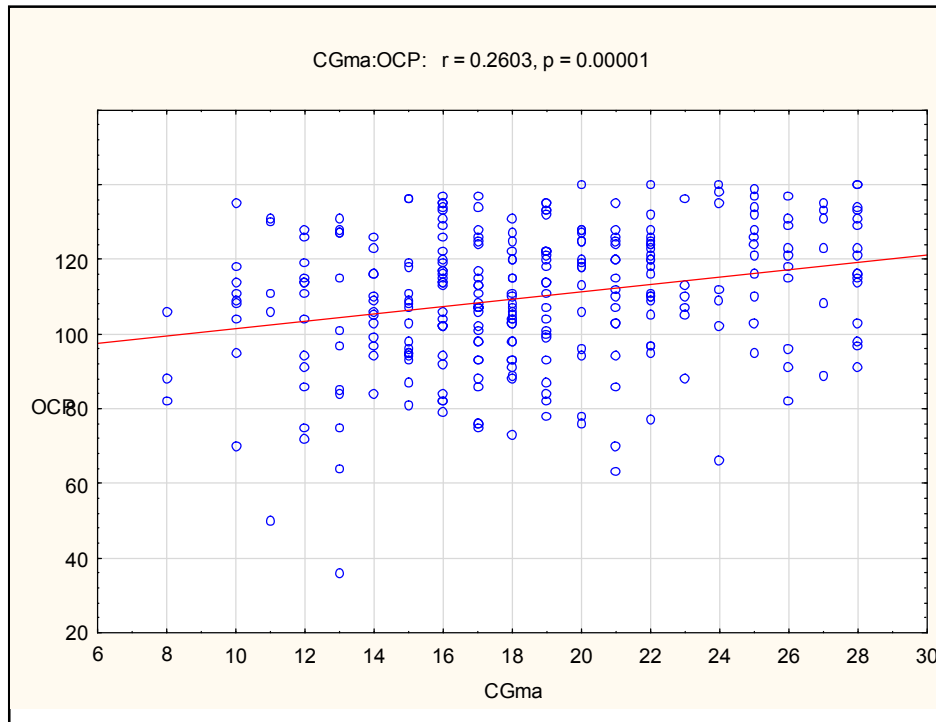


Figure 4.7 The relationship between SOC (manageability) and work adjustment

A more detailed discussion of these results is presented in the next chapter (see Chapter 5). The next session will present the findings of the multiple regression analysis.

4.4.2 Multiple regression analysis

This section presents the results of the research conducted in terms of the multiple regression analysis. Multiple regression analysis is utilised when there are more than one predictor variables in the research and more information needs to be established regarding the relationships between the dependent and independent variables (Gravetter & Wallnau, 2005). Multiple regression analysis is utilised to explore the relationships between multiple predictor (independent) variables and a criterion (dependent) variable (Field, 2000). This statistical procedure results in the formulation of R, the multiple correlation coefficient, which is the “overall correlation of the predictors with the criterion variable” (Coolican, 2004, p. 463).

The correlation coefficient squared (R^2) is a “measure of the amount of variability in one variable that is explained by the other” (Field, 2000, p. 90). Multiple regression is determined by the coefficient of determination R^2 , and indicates “the proportion of the variability in one of the variables accounted for by the regression on the other” (Myers et al., 2010, p. 544). It indicates the “proportion of variance in the criterion variable that has been accounted for by the predictors taken together” (Coolican, 2004, p. 463). For the purpose of this study the relationships between the independent variables (emotional intelligence, locus of control, self-efficacy and sense of coherence) and dependent variable (work adjustment) were tested.

The summary statistics for the whole regression model (Figure 4.5) is presented in Table 4.6. The regression statistics for the independent variables are presented in Table 4.7.

Table 4.6

Summary statistics for the dependent variable

Statistic	Value
Multiple R	0.44
Multiple R^2	0.20
Adjusted R^2	0.19
F(4,288)	17.69
p	<0.01
Std Err of Estimate	16.40

The summary statistics (see Table 4.6) indicated that the multiple coefficient of determination (R^2) of the variation in the dependant variable (work adjustment) accounted for by the independent variables (EI, LOC, SE, SOC) is 0.20. This indicates that approximately 20 percent of the variability of work adjustment is accounted for by the predictor variables of emotional intelligence, locus of control, self-efficacy and sense of coherence (see Figure 4.5). The R^2 regression indicates the measure of goodness of fit of the linear regression line tested in the model (Field, 2000).

The adjusted (or shrunken) squared multiple correlation coefficient for this study is 0.19. This indicates that 19 percent of the variability of work adjustment is accounted for by the model (Figure 4.5) after considering the number of predictor variables present in the model. The model with work adjustment as dependent variable and emotional intelligence, locus of control, self-efficacy and sense of coherence as independent variables was statistically significant [$F(4,288)=17.69, p<0.001$].

Table 4.7

Results of multiple regression analysis for work adjustment

n=295	Beta (β)	Std Err of Beta	t	p-value
Intercept			4.08	0.000056
EI	0.48	0.16	2.91	0.003894
LOC	-0.37	0.10	-3.68	0.000270
SE	1.22	0.25	4.81	0.000002
SOC	0.19	0.08	2.32	0.020960

Notes: EI=emotional intelligence; LOC=locus of control; SE=self-efficacy; SOC=sense of coherence

The standardised regression coefficient (Beta β) indicates the regression coefficient expressed in a standard score form (Coolican, 2004). The higher the beta value the greater the impact of the predictor variable (EI, LOC, SE and SOC) on the criterion variable (work adjustment). Self-efficacy made the largest unique contribution to work adjustment ($\beta=1.22$). The t value in the coefficients table is found by dividing the unstandardised b value by its standard error. "If the t is significant we know that the predictor is making a significant contribution to the prediction of the criterion; that is, the extra amount of variance in the criterion it accounts for is significant" (Coolican, 2004, p. 467).

The p-value indicates that the confidence levels of the variables in relation to the dependent variable for the whole regression model were statistically significant ($p<0.01$). The larger the value of t of a criterion and the smaller the p value, the greater contribution of that prediction of the dependent variable.

If the p value is less than 0.05 the predictor variable is making a significant contribution to the prediction of the dependent variable. If the significance is higher than 0.05 the variable is not making a significant unique contribution to the prediction of the dependent variable (Pallant, 2006). The standardised coefficients indicated that self-efficacy's beta value is the highest with a p value of lower than 0.05 significance ($\beta=1.22$, $p<0.001$).

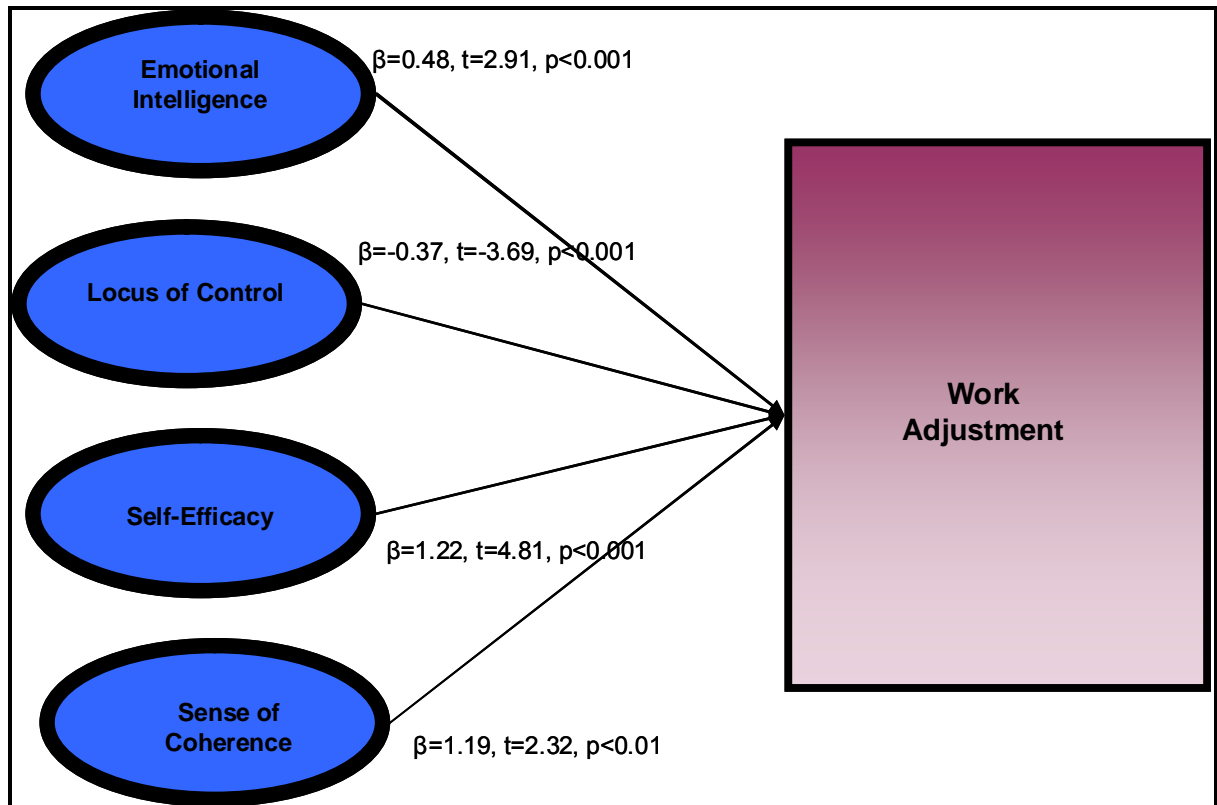


Figure 4.8 Predictors of work adjustment

Emotional intelligence presented a beta value of 0.48 and a p value of 0.003894 indicating a moderate contribution to the value of the dependent variable (work adjustment) ($\beta=0.48$, $p<0.01$). Locus of control presented a beta value of -0.37 and a p value of 0.000270 indicating a moderate contribution to the value of the dependent variable (work adjustment) ($\beta=-0.37$, $p<0.001$). Sense of coherence presented a beta value of 0.19 and a p value of 0.020960 indicating a moderate contribution to the value of the dependent variable (work adjustment) ($\beta=0.19$, $p<0.01$).

For the purpose of this study self-efficacy ($\beta=1.22$, $t=4.81$, $p<0.001$), emotional intelligence ($\beta=0.48$, $t=2.91$, $p<0.01$), locus of control ($\beta=-0.37$, $t=-$

3.68, $p < 0.001$) and sense of coherence ($\beta = -0.18$, $t = -2.32$, $p < 0.001$) are significant predictors of work adjustment (Figure 4.8).

Two assumptions have to be tested in order for the results of multiple regression analysis to be relevant: multicollinearity and normality. The next section explores these assumptions.

4.4.2.1. Multicollinearity

According to Field (2000) the assumption of multicollinearity has to be tested when doing multiple regression analysis. Collinearity exists when predictor variables also correlate with one another (Coolican, 2004). Multicollinearity exists when “there is a strong correlation between two or more predictors in a regression model” (Field, 2000, p. 131). Multicollinearity “is used to describe situations in which there are moderate to high correlations among some or all of the explanatory variables” (Everitt, 2010, p. 91). It occurs when “predictor variables included in a regression equation are correlated so that they can be predicted from the other predictors in the equation.

If at least one predictor variable can be perfectly predicted from the others, there is perfect multicollinearity. Given perfect multicollinearity, an infinite number of regression equations will fit the data equally well, so the statistical packages cannot conduct a regression analysis” (Myers et al., 2010, p. 578). Multicollinearity thus refers to the amount of variance that overlaps between the predictor variables in the model.

The multicollinearity of the independent variables emotional intelligence, locus of control, self-efficacy and sense of coherence is presented in Table 4.8.

Table 4.8***Redundancy of independent variables***

	Tolerance	R-square	Partial Cor	Semipart Cor
EI	0.96	0.04	0.17	0.15
LOC	0.93	0.06	-0.21	-0.19
SE	0.90	0.09	0.27	0.25
SOC	0.85	0.14	0.14	0.12

Notes: EI=emotional intelligence; LOC=locus of control; SE=self-efficacy; SOC=sense of coherence

To assess the prediction model for this study (see Figure 4.5) and the results presented in Table 4.6 and Table 4.7, the correlation between the independent variables have to be considered. The tolerance level indicates the amount of variance of a variable that is not explained by other variables (Pallant, 2006). The tolerance values in the present results (0,95, 0.88, 0.89) indicate that the assumption of multicollinearity is adhered to. Thus implying that the researcher can continue with the multiple regression analysis for statistical purposes.

4.4.2.2 Normality

The assumption of normality investigates the distribution of the data. When a distribution is normal, the values of skewness and kurtosis are zero. "If there is a positive skewness, there is a pileup of cases to the left and the right tail is too long; with negative skewness, there is a pileup of cases to the right and the left tail is too long. Kurtosis values above zero indicate a distribution that is too peaked with long tails, while kurtosis values below zero indicate a distribution that is too flat" (Tabachnick & Fidell, 1996, p. 71).

When assessing the data presented in Figure 4.9 for this study, it indicates that the data approximately complies with the assumption of normality. Thus the researcher can continue with the multiple regression analysis for statistical purposes.

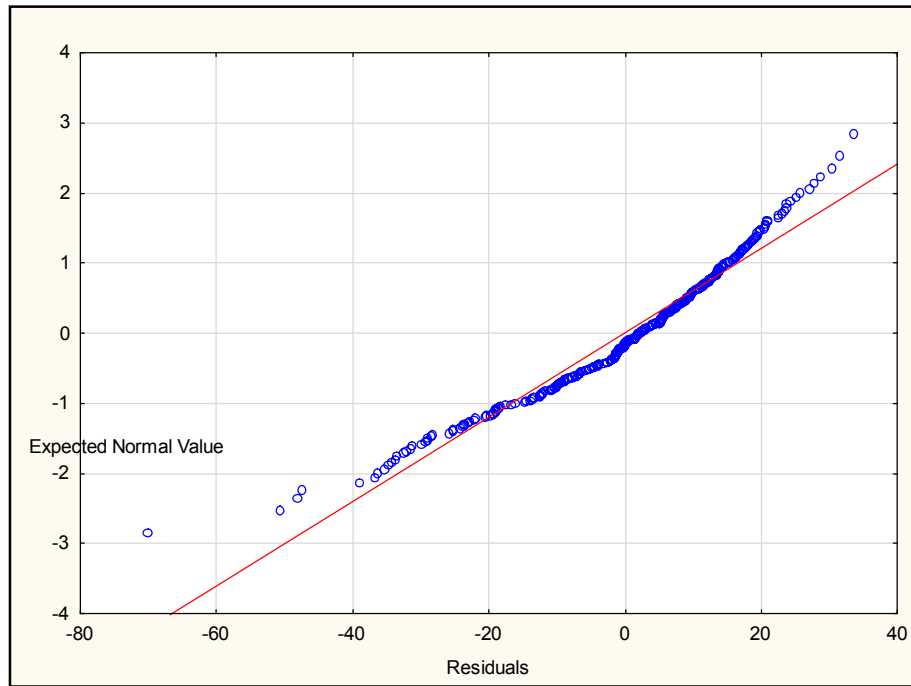


Figure 4.9 Normal probability plot

4.5 CONCLUSION

This chapter presented the results for this study. This included the depiction of the descriptive statistics to organise, summarise and simplify the data. The internal consistency of the items was tested presenting the Cronbach alpha coefficients for the various instruments. The Pearson correlation coefficient correlations were explained with the resulting acceptances of the stated hypotheses. This chapter concluded with the results from the regression analysis, including the multiple regression, multicollinearity and normality for the results. The next chapter is a discussion of the implications of the results, the limitation of the study as well as recommendations for future research.

CHAPTER 5

DISCUSSION, INTERPRETATION AND IMPLICATIONS

5.1 INTRODUCTION

The previous chapter (see Chapter 4) presented the empirical findings of this research. This chapter will discuss these findings in the light of other research. Thereafter practical implications of the results are presented for the development of emotional intelligence, locus of control, self-efficacy and sense of coherence.

5.2 DISCUSSION OF RESULTS

For this research the constructs of emotional intelligence, self-efficacy, locus of control and sense of coherence (as part of the person) were analysed to determine whether there is relationship between these constructs as antecedents to work adjustment within a South African military sample. The results can also be used to predict whether individuals will be able to adjust to the military environment or not, influencing selection and placement staffing decisions by career managers. Results can also be utilised for change management activities within the SANDF.

The research aimed at establishing a starting point for the evaluation of possible relationships between emotional intelligence, locus of control, self-efficacy and sense of coherence as antecedents within the nomological net of predictors for work adjustment. The hypotheses stated (see Section 3.2) were tested and the results presented in Chapter 4. This section will discuss the implication of the results of the inferential statistics, combining the findings of the correlations and multiple regression analysis. The findings can be used to develop interventions for the SANDF that will facilitate the adjustment of members within the military environment and enhance the deployment capability and force preparedness of the SANDF.

5.2.1 Work adjustment and emotional intelligence

This section discusses the results of the current research regarding work adjustment and emotional intelligence. The hypothesis presented in Chapter 3 (see Section 3.2) was tested and the results presented in Chapter 4 (see Section 4.3). The hypothesis regarding work adjustment and emotional intelligence was as follows:

Hypothesis 1

H₀1: Emotional intelligence does not have a relationship with work adjustment.

H₁1: Emotional intelligence has a relationship with work adjustment.

The alternative hypotheses (see Section 4.4.1) stating that emotional intelligence has a relationship with work adjustment was accepted. The results indicated that the relationship is positive. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r=0.15$, $p<0.001$) (see Table 4.4). According to the multiple regression analysis performed (see Table 4.7 and Figure 4.8), emotional intelligence made a moderate significant contribution to the value work adjustment ($\beta=0.48$, $p<0.01$). Emotional intelligence made the second largest unique contribution within the model (see Figure 4.8) towards work adjustment. Therefore the correlations results and multiple regression analysis both indicate that emotional intelligence is a predictor of work adjustment.

According to the literature review, emotional intelligence for the purpose of this study is (see Section 2.4.1) defined as "the ability to monitor one's own and others' feelings to discriminate among them, and to use this information to guide one's thinking and action" (Salovey & Mayer, 1990, p. 189). The four branches or quadrants are described as emotional perception, emotional integration, emotional understanding and emotional management (Mayer et al., 2000). The individual with high levels of emotional intelligence will thus be able to better perceive emotions, use them in their thinking process,

understand the meaning of the emotions and manage emotions better than other individuals (Mayer et al., 2004).

Due to the novelty of this study, no previous results for the South African military environment exist, but these findings are congruent with the findings of Bar-On et al. in 2006 within the Israeli military environment that concluded that emotional intelligence for high performers was significantly higher than that of low performers, and the United Air Force study that concluded that emotional intelligence can predict performance in the military environment (Bar-On et al., 2006). The study by Schutte et al. (2007) also indicated significant relationships between emotional intelligence and mental health, psychosomatic health and physical health. Even though the findings were related to emotional intelligence and performance, they can still contribute to the current research.

Previous research also concluded that emotional intelligence predicts leadership potential of military members (Bar-On et al., 2006). Similar to these findings, a study within the SANDF indicated a moderate significant positive correlation between emotional intelligence and leader success within the military environment (Grundling, 2012). Despite the fact that these findings related to emotional intelligence and leader success, they can contribute to the current research, because both studies were conducted within the military environment, and one within the South African military environment.

According to Major General Jeffery from the Canadian Armed Forces, emotional capability is an essential element for military command effectiveness. "Militaries need to (a) understand how individuals cope with stress, (b) know how to plan for its effects, (c) have strategies in place for pre-deployment training for both members and their families, and (d) objectively assess and treat individuals who are suffering from stress in-theatre" (McCann & Pigeau, 2000, p. 394). Although the focus of the cited study in a military environment focused on military command effectiveness, it is proposed that the relevance can be to various levels of command within the

organisation. Therefore, for the purpose of this study, these findings can be relevant to officers, warrant officers, non-commissioned officers and other ranks within the military environment.

Therefore the SANDF should strive to have soldiers with higher levels of emotional intelligence in order to adjust more readily to the military work environment. These soldiers will then be able to better perceive emotions, use emotions in their thinking process, understand the meaning of the emotions and ultimately manage emotions better within the military environment.

5.2.2 Work adjustment and locus of control

To start the discussion on work adjustment and locus of control, the author would prefer to first address an issue raised previously in this research. In the literature review (see Section 2.4.4) the question was raised whether sense of coherence, self-efficacy and locus of control are the same concept. According to the results of this research (see Table 4.8), sense of coherence, self-efficacy and locus of control are three distinct constructs, even though some overlapping variance has been found. The current research's findings (see Table 4.8) are in agreement with Antonovsky (1993) that regards sense of coherence, self-efficacy and locus of control as different constructs.

In the literature review (see Section 2.4.3) the question was also raised whether locus of control and self-efficacy are the same concept. According to the results of this study (see Table 4.8), locus of control and self-efficacy are distinct concepts, although a small variance overlaps between the two constructs. The current research's findings (see Table 4.8) are similar to the opinions of Sappington (1989). Therefore for the purpose of this research locus of control, self-efficacy and sense of coherence are regarded as separate constructs.

This section will now discuss the results of the current research regarding work adjustment and locus of control. The hypothesis presented in Chapter 3

(see Section 3.2) was tested and the results presented in Chapter 4 (see Section 4.3). The hypothesis regarding work adjustment and locus of control was as follows:

Hypothesis 2

H₀₂: Locus of control does not have a relationship with work adjustment.

H₁₂: Locus of control has a relationship with work adjustment.

The alternative hypotheses (see Section 4.4.1) stating that locus of control has a relationship with work adjustment was accepted. Although the results indicate a statistically significant negative correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is bordering on medium ($r=-0.27$, $p<0.001$) (see Table 4.4). This relationship is of a negative nature, therefore the higher the one construct's value the lower the other construct's value. Thus if you increase work adjustment, then locus of control will be lower on the instrument. But due to the nature of the instrument used, a high score on the instrument indicates an external locus of control while a lower score on the instrument indicates an internal locus of control. Therefore, to achieve higher levels of work adjustment an individual has to develop an internal locus of control.

According to the multiple regression analysis performed (see Table 4.7 and Figure 4.8), locus of control made a moderate significant contribution to the value work adjustment ($\beta=-0.37$, $p<0.001$). Locus of control made the third largest unique contribution within the model (see Figure 4.8) towards work adjustment. Accordingly, the correlation results and multiple regression analysis designate that locus of control is a predictor of work adjustment.

According to the literature review (see Section 2.4.2), locus of control for this study is defined as "the ways in which individuals attribute responsibility for events to factors within themselves and within their control or to factors outside their control" (Pfeiffer, 2003, p. 32). An individual who believes they are in control of their fate and can control their environment has an internal locus of control, while the individual who believes others are in control of their

fate and they cannot control their environment themselves has an external locus of control (Pareek, 2003).

In a South African study, Bosman et al. (2005) also used the Work Locus of Control scale developed by Spector. They found that internal locus of control had a practically significant relationship with lower levels of job insecurity. In another South African study the results indicated that more experiences of flow are positively correlated with internal locus of control and internals will more likely choose autonomous jobs and experience more optimal performance (Taylor et al., 2006). Although these studies have civilian samples, the results might be relevant for this research, due to the similarities between the two South African work environments.

A study in Northern Ireland among fire-fighters revealed that greater psychological distress was related to external locus of control and greater avoidance coping. Therefore individuals with internal locus of control will experience less psychological distress during stressful or traumatic events (Brown et al., 2002). Although this study was not conducted within the military environment, fire-fighters also experience a more strenuous work environment than ordinary civilians and therefore the author is of the opinion that this study has a degree of relevance to the military work environment.

The current research is congruent with the findings in the Canadian Forces that concluded that military members with internal locus of control were rated higher on leadership behaviour than externals (Bradley et al., 2002). A study on Canada's Royal Military College cadets also found that internal locus of control acted as a significant predictor of the cadets' final grade obtained during training. These cadets worked harder as they believed that there was a direct relation between their personal effort and their performance outcomes (Bradley & Nicol, 2006).

The SANDF should endeavour to have soldiers with an internal locus of control in order to adjust more readily to the military work environment. These

soldiers will then believe they are in control of their fate and they can control their work environment.

5.2.3 Work adjustment and self-efficacy

To start the discussion on work adjustment and self-efficacy, the author would prefer to first address an issue raised previously in this paper. In the literature review (see Section 2.4.4) the question was raised whether sense of coherence and self-efficacy are the same concept. According to the results of this research (see Table 4.8), sense of coherence and self-efficacy are two distinct constructs, even though some overlapping variance has been found. The current research's findings are in agreement with Antonovsky (1993) that regards sense of coherence and self-efficacy as different constructs, as well as other findings which indicated that self-efficacy and sense of coherence are separate constructs (Vastamaki et al., 2011).

This section will now discuss the results of the current research regarding work adjustment and self-efficacy. The hypothesis presented in Chapter 3 (see Section 3.2) was tested and the results presented in Chapter 4 (see Section 4.3). The hypothesis regarding work adjustment and self-efficacy was as follows:

Hypothesis 3

H₀₃: Self-efficacy does not have a relationship with work adjustment.

H₁₃: Self-efficacy has a relationship with work adjustment.

The results indicate a statistically significant positive correlation, and according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is medium ($r=0.34$, $p<0.001$) (see Table 4.4). The alternative hypothesis (Section para 4.4.1) stating that self-efficacy has a relationship with work adjustment was accepted, and the nature of the relationship was positive. Therefore, self-efficacy has a positive relationship with work adjustment.

According to the multiple regression analysis performed (see Table 4.7 and Figure 4.8), self-efficacy made a moderate significant contribution to the value work adjustment ($\beta=1.22$, $p<0.001$). Self-efficacy also made the largest unique contribution within the model (see Figure 4.8) towards work adjustment. The correlation results and multiple regression analysis both indicate the significance of self-efficacy in predicting work adjustment.

According to the literature review (see Section 2.4.3), self-efficacy for this study is defined as “the conviction that one can successfully execute the behaviour required to produce the outcomes” (Bandura, 1977, p. 193).

In a study within the SANDF the findings indicated a moderate significant positive relationship between self-efficacy, optimism and hope (as part of psychological capital) and leader success within the military environment (Grundling, 2012). These findings are also congruent with findings that self-efficacy beliefs influence leader behaviour, and they can also be transferred across situations. Thus leaders can be prepared for dangerous contexts in general during training. Then leaders can adjust more readily to similar dangerous situations when on the battlefield (Samuels et al., 2010). Although the focus of the cited studies was on leader success and leader behaviour, the results also have bearing on this study, as both have been conducted within the military work environment.

The current research agrees with the research conducted which concluded that assessment of self-efficacy could lead to individuals with the greatest probability of adjustment (Von Kirchenheim & Richardson, 2005) as well as the findings that well adjusted individuals have higher levels of self-efficacy (Scott & Judge, 2009). This also correlates with other research that indicated that the higher the level of self-efficacy of the individual, the more readily he or she adjusts to the work environment (Griffin & Hesketh, 2003) and also adjusts easier than individuals with lower levels of self-efficacy (Strauser et al., 2002).

A study conducted in the United States Army indicated that individuals with higher self-efficacy beliefs predicted successful work outcomes (Gruber et al., 2009). Another military study indicated that soldiers perceiving military service as a positive experience usually experienced higher self-efficacy beliefs which lead to better coping skills and adjustment to the military environment (Skopp et al., 2011)

The SANDF should venture to have soldiers with higher levels of self-efficacy in order to adjust more readily to the military work environment. These soldiers will then have the conviction that they can successfully execute the behaviour necessary to produce the desired outcomes within the military environment.

5.2.4 Work adjustment and sense of coherence

This section will now discuss the results of the current research regarding work adjustment and sense of coherence. The hypothesis presented in Chapter 3 (see Section 3.2) was tested and the results presented in Chapter 4 (see Section 4.3). The hypothesis regarding work adjustment and sense of coherence was as follows:

Hypothesis 4

H₀4: Sense of coherence does not have a relationship with work adjustment.

H₁4: Sense of coherence has a relationship with work adjustment.

The results indicate a statistically significant positive correlation, and according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r=0.22$, $p<0.001$) (see Table 4.4). The alternative hypothesis (see Section 4.4.1) stating that sense of coherence has a relationship with work adjustment was accepted, and the nature of the relationship was positive. Therefore, sense of coherence has a positive relationship with work adjustment. According to the multiple regression analysis performed (see Table 4.7 and Figure 4.8), sense of coherence made a moderate significant contribution to the value work adjustment ($\beta=0.19$,

$p < 0.01$). Sense of coherence also made the smallest unique contribution within the model (see Figure 4.8) towards work adjustment. Thus the correlation results and multiple regression analysis indicate that sense of coherence acts as a predictor for work adjustment.

Hypothesis 5

H₀5: Sense of coherence (subscale meaning) does not have a relationship with work adjustment.

H₁5: Sense of coherence (subscale meaning) has a relationship with work adjustment.

The results indicate a statistically significant positive correlation, and according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r = 0.16$, $p < 0.001$) (see Table 4.5). The alternative hypothesis (see Section 4.4.1) stating that sense of coherence (meaning) has a positive relationship with work adjustment was accepted, and the nature of the relationship was positive. Therefore, sense of coherence (meaning) has a positive relationship with work adjustment.

Hypothesis 6

H₀6: Sense of coherence (subscale comprehensibility) does not have a relationship with work adjustment.

H₁6: Sense of coherence (subscale comprehensibility) has a relationship with work adjustment.

The returned responses totalled 295 and all were analysed for sense of coherence (comprehensibility) and work adjustment. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r = 0.15$, $p < 0.001$) (see Table 4.5). The alternative hypothesis (see Section 4.4.1) stating that sense of coherence (comprehensibility) has a positive relationship with work adjustment was accepted, and the nature of the relationship was positive. Therefore, sense of coherence (comprehensibility) has a positive relationship with work adjustment.

Hypothesis 7

H₀₇: Sense of coherence (subscale manageability) does not have a relationship with work adjustment.

H₁₇: Sense of coherence (subscale manageability) has a relationship with work adjustment.

The returned responses totalled 295 and all were analysed for sense of coherence (manageability) and work adjustment. Although the results indicate a statistically significant positive correlation, according to Cohen's criteria (Coolican, 2004) the practical effect of this relationship is small ($r=0.26$, $p<0.001$) (see Table 4.5). The alternative hypothesis (see Section 4.4.1) stating that sense of coherence (manageability) has a positive relationship with work adjustment was accepted, and the nature of the relationship was positive. Therefore, sense of coherence (manageability) has a positive relationship with work adjustment.

According to the literature review (see Section 2.4.4), sense of coherence for this study is defined as "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement. These three components are called comprehensibility, manageability and meaningfulness" (Antonovsky, 1993, p. 725).

The current research's findings supports other findings which indicated that individuals with stronger sense of coherence will be better adjusted and they can also make the necessary adjustments in life to ensure an effective, stable and productive existence (Strauser & Lustig, 2003).

Individuals with stronger sense of coherence will view the world as manageable, comprehensible and meaningful, and are therefore more likely to engage in developmental tasks associated with work adjustment. These

adjustments will also create positive relations with their work environment (Strauser & Lustig, 2003). These findings also concur with Lofquist and Dawis' Theory of Work Adjustment (1969; 1991) which indicates that when individuals experience incongruence with their work environment, they will adjust to ensure better fit with the work environment. This also supports the theory of person environment fit that purports that individuals will strive to achieve optimal fit or congruence with their environment (Edwards, 2008).

The SANDF should contend to have soldiers with higher levels of sense of coherence in order to adjust more readily to the military work environment. These soldiers will then have the confidence to perceive the military environment as structured, predictable and understandable, thus the military will be comprehensible. These soldiers will perceive that the military environment has the resources to meet their demands, thus being manageable and that these demands are challenges that are worthy of their time and engagement, thus the military environment is regarded as meaningful. Soldiers with higher levels of sense of coherence will thus view the strenuous military work environment as comprehensible, manageable and meaningful.

5.3 CONTRIBUTIONS OF THE STUDY

This study attempted to make a contribution to the field of psychology at work through exploring possible relationships between emotional intelligence, sense of coherence, self-efficacy, locus of control and work adjustment. The empirical findings established positive relationships (see Chapter 4 and Section 5.2) between these constructs (emotional intelligence, sense of coherence, self-efficacy and internal locus of control) as antecedents to work adjustment. This research consequently proposes contributions to the following aspects, including theory and literature, practice for industrial/organisational psychologists as well as human resource managers, policies, labour and military commanders. The following section will be a discussion of these aspects.

5.3.1 Contributions towards theory and literature

The current research contributes to the existing body of literature on work adjustment through the development of a significant and unique model for the military work environment within the South African context (see Figure 6.1). This model can subsequently act as a starting point for future research into the various components encompassing the nomological net of antecedents to work adjustment.

The theory of work adjustment (Lofquist & Dawis, 1969; 1978; 1991) postulates that the prediction of work adjustment can be envisioned through conceptualising the relationship between individuals and their specific work environments. The current research provides a comprehensive theoretical layout for the theory of work adjustment and person-environment fit as it evolved through the years into the modern era of the world of psychology. It has also provided a comprehensive presentation of the applicability and utility of person-environment fit for the workplace.

Personality has been associated with the theories of work adjustment and person-environment fit (Lofquist & Dawis, 1969; 1978; 1991; Saks & Ashforth, 2002). The current research confirmed the empirical existence of positive relationships between the personality dispositions of emotional intelligence, sense of coherence, internal locus of control, self efficacy and work adjustment. This research acts as a good empirical starting point to investigate these and other antecedents of work adjustment.

The military work environment is unique from civilian organisations in several ways. The current research contributes to the literature (see Section 2.3) by providing a thorough and coalescent discussion of these factors that emphasise the uniqueness of the military environment. This serves as a meaningful source for other researchers who want to investigate the unique challenges for the military environment when they are conducting research.

5.3.2 Contributions towards practice

The importance of an organisation's intellectual capital is recognised by industrial psychologists, human resource managers, researchers and academics alike. "The war for talent, the changing nature of the workforce, shifting social expectations about work and family, and increasingly knowledge-based strategies have pressured organisations to rethink their role in managing careers and developing their human capital" (Cummings & Worley, 2009, p. 453). The utility of the person-environment fit theory within the work adjustment theories elucidate why the organisation, industrial/organisational psychologists and human resource managers should strive to obtain person-environment fit (Breiden et al., 2006; Carless, 2005; Feij et al., 1999; Saks & Ashforth, 2002).

When the organisation can achieve person-environment fit and work adjustment, it can lead to several positive work outcomes (see Section 2.2.4) including attraction to the organisation (Cable & DeRue, 2002), job acceptance intentions (Carless, 2005), recruitment and selection (Johnson et al., 2003), tenure and turnover intentions (Swanson & Fouad, 1999), organisational culture (O'Reilly et al., 1991), socialisation (Feij et al., 1999), career development and management (Saks & Ashforth, 2002), training and development (Hershenson, 1996), job satisfaction (Chen & Chiu, 2008), motivation (Feij et al., 1999) and organisational commitment (Piasentin & Chapman, 2007).

The current research confirmed the empirical existence of positive relationships between the personality dispositions of emotional intelligence, sense of coherence, internal locus of control, self efficacy and work adjustment. Therefore, industrial/organisational psychologists and human resource managers should take note of the role of personality factors within the workplace when doing recruitment, selections, placements and post profiling. They can also design training programmes, sensitisation training and developmental programmes to enhance these dispositions for individuals where needed.

Even though the current research was conducted within the South African military work environment, the author is of the opinion that civilian organisations and their industrial/organisational psychologists and human resource managers can also benefit from this research. Despite the unique stressors within the military work environment, there are factors that are similar in the work environments, for example the political climate, demographics, labour policies, economic climate and social environment of individuals within the workplace.

5.3.3 Contributions towards labour and policies

The utility of the person-environment fit theory within the work adjustment theories elucidates why the organisation, industrial/organisational psychologists and human resource managers should strive to obtain person-environment fit (Breiden et al., 2006; Carless, 2005; Feij et al., 1999; Saks & Ashforth, 2002). Trying to achieve person-environment fit within the workplace can also influence policy making and other labour related matters.

It is suggested that organisations ensure that they have relevant policies in place that understand the role of psychology and personality within the workplace. Organisations should decide whether basing recruitment, selection, placement and staffing decisions on some components in the workplace are applicable and necessary. Therefore post profiling is very important and individuals entering the organisation or doing career planning within the organisation should be made aware of the impact of fitting a specific post profile.

For some posts these decisions are easier than for other posts. For example, most people will think that there are obviously only certain people that will fit the profile of a fighter pilot, but will that distinction be as easy for a platoon member or office worker? In the military work environment it is not uncommon to dismiss members due to operational reasons¹⁰. But then the

¹⁰ This is where a member does not meet the requirements of a post to fulfil his/her duties.

legal aspects of these decisions must not be disregarded. It will most likely not happen that a member with a 'different' personality be dismissed from an organisation; they will most likely just be migrated to a new post. The author is not proposing drastic measures in terms of personality within the workplace, but merely trying to sensitise policy makers and labour practitioners that personality aspects can have an influence on organisational outcomes.

5.3.4 Contributions for military commanders

As mentioned above, the current research contributes to the existing body of literature on work adjustment through the development of a significant and unique model for the military work environment within the South African context (see Figure 6.1). It also confirmed the empirical existence of positive relationships between the personality dispositions of emotional intelligence, sense of coherence, internal locus of control, self efficacy and work adjustment.

This information is useful for military commanders. Understanding that the unique military environment requires people with specific abilities, traits and skills is important when making recruitment, selection, placement, development and promotional decisions. The current research can also elucidate the importance of having the right people in the right posts in order for the SANDF to function at an optimal level. This emphasises the importance of proper post profiling for all posts in the SANDF.

The author is not proposing that military commanders base their command decisions on personality factors alone, but is trying to emphasise that by developing certain personality traits, the military work environment can benefit from more well adjusted soldiers. By developing these 'soft skills', and not just providing physical and corps-related training, the SANDF can also increase its functionality, which in turn can enhance its ability to become the military leader in Africa.

5.4 RECOMMENDATIONS FOR PRACTICE

The constructs of emotional intelligence, self-efficacy, sense of coherence and internal locus of control can be developed simultaneously or separately. Due to the fact that locus of control, self-efficacy and sense of coherence all relates to perceived control, manageability and meaning in life, the author is of the opinion that these can be developed simultaneously. The next section will present possible ways through which these aspects of individuals can be developed.

The first step suggested for these developmental activities will be self-awareness. In the context of the work environment, individuals have to be made aware of their own levels of emotional intelligence, locus of control, self-efficacy and sense of coherence. This self-awareness is a “positive goal of most training techniques that aim at behaviour changes. Self-awareness means becoming aware of one’s existing patterns of behaviour in a way that permits a relatively non-defensive comparison of those patterns with potential new ones” (Cummings & Worley, 2009, p. 754). Once an individual becomes self-aware, he or she can learn to develop these skills where it is needed within the work environment.

5.4.1 Augmenting work adjustment through developing emotional intelligence

The following recommendations for practice are suggested to increase work adjustment through developing the emotional intelligence or knowledge of the individual within the work environment:

The influence of emotional intelligence begins with the recruitment and retention of talent within the organisation (Cherniss, 2001). Although the organisation can benefit from recruiting and selecting individuals with a high emotional intelligence, this should not serve as a discriminating factor within the selection process. Emotional intelligence can still be developed later on

within the career of the individual, and if he or she complies with the basic requirements of the job, that should serve as a guide in the process.

Training programmes can be developed to improve individuals' emotional intelligence and skills (Salovey & Grewal, 2005). The design and choice of training programmes for emotional intelligence is influenced by the challenges involved (Lopes et al., 2005). During formal training in the organisation (SANDF) an awareness module about emotional intelligence can be presented to all individuals. This module would not be formally assessed and the focus should be to make the individual aware regarding emotional intelligence and knowledge and how to develop it. To increase the trainee's emotional knowledge, the following four quadrants of emotional intelligence can be introduced to the trainee:

Quadrant I: perceiving emotions. Training should focus on the reading and recognition of facial expressions in order for the individual to more accurately identify and distinguish between varying emotions. The individual can learn to more accurately decode and pay attention to emotional cues within the workplace (Lopes et al., 2005).

Quadrant II: facilitating thinking. Training should focus on the individual's understanding of the consequences of emotions and emotional cues. This in turn can enhance the individual's capacity to use emotions in order to guide thinking and decision making within the workplace (Lopes et al., 2005).

Quadrant III: understanding emotions. Training should focus on how emotions can start, evolve and progress through various stages. The differences and similarities between emotions can be discussed as well as what the different triggers or set-offs for various emotions are within the workplace (Lopes et al., 2005).

Quadrant IV: managing emotions. Training should focus on assisting individuals to broaden their repertoire of coping strategies and attempting novel ways of handling emotionally charged situations. This can include

discussions on coping strategies and practical ways of dealing with difficult situations. Role plays can also assist individuals in experiencing and seeing other alternatives to dealing with situations. This can facilitate emotional management within the workplace (Lopes et al., 2005).

Training and awareness programmes should therefore make use of experiential learning opportunities. This involves interpersonal interaction between members and role plays that can facilitate the learning process (Lopes et al., 2006).

During career counselling emotional intelligence training can be highlighted as an aspect that individuals should learn about and be aware of in the workplace. Development plans for individuals can also include exposure to emotional intelligence (Cherniss, 2001). As part of the development plan of each organisational member it should be planned that the individual attend such training and awareness programmes. This can facilitate the advancement of the individual's development as well as serve as a guide for the human resource manager in terms of members who must still attend training or a developmental workshop (Lopes et al., 2005).

Organisations with sufficient human and financial resources can explore the possibility of using self-and-rater report behavioural measures of emotional intelligence. This can offer a great utility for developing emotional intelligence in the workplace (Palmer et al., 2009). Measurement tools such as the Genos EI Inventory, for example, can be useful to facilitate this process, as this inventory has demonstrated meaningful relationships with several workplace performance indices (Gignac, 2008).

Feedback is a crucial element within the training and development of emotional intelligence. It is suggested that a coaching and mentoring programme be implemented to enhance the development of the individual. Research regarding mentoring and coaching has found that individuals learn most successfully if they receive timely, comprehensible and objective feedback regarding performances (Lopes et al., 2006). If an individual

receives quality feedback it can enhance both the development of emotional and social skills (Lopes et al., 2006). Therefore training and development of emotional intelligence and knowledge should be regarded as a continuous effort on the part of the individual.

Mentors, coaches and supervisors can create relationships with individuals that can enhance organisational effectiveness. Coaching is the “process by which individuals gain the skills, abilities and knowledge they need to develop themselves professionally and become more effective in their jobs” (Stone, 2007, p. 11). Coaching is aimed at “getting people to want to achieve something truly meaningful in life” (Joubert, 2007, p. 60). It improves performance and leverages talent and achievement. In mentoring the focus is to share experiences, wisdom and practical savvy to enable others to take on tasks beyond those designated in a job description (Stone, 2007). The use of coaching and mentoring systems can also assist in feedback opportunities. By providing individuals with comprehensive and detailed feedback emotional intelligence can be developed. This can be achieved if the coaches and mentors are well conversed with the concept and working of emotional intelligence and knowledge in the workplace. E-mentoring can also be utilised (Stone, 2007). This is a virtual, offsite mentoring programme that provides participants with more flexibility. This includes the use of e-mails, teleconferencing and telephone calls that can replace face-to-face meetings.

Peer feedback is also relevant to developing emotional intelligence in the workplace. Individuals might feel more perceptive to feedback from their peers than from someone to be regarded in a leadership position. Therefore peer education programmes should be implemented in the workplace.

According to Jarvis (2005), successful programmes to develop emotional intelligence should have the following features:

- [1] Specific behaviours must be clearly trained, because programmes emphasising only attitudes do not cause significant changes.

[2] Learners must become empowered with new skills and be able to participate in formulating some of the training outcomes, which in turn will create buy-in and a sense of ownership.

[3] The programme should follow a systematic design through which creative ways of thinking are taught. Each step should be formulated from basics, and can focus on elements such as clarifying a problem, evaluating alternative solutions and reflecting on the success of the choice.

[4] The generic skills must be reapplied to the overall real life situations. These skills can include assertiveness, problem-solving and empathy, which can be applied to everyday situations outside the programme.

[5] The design of the programme should focus on active participation and positive feedback. The emphasis should be on rewarding positive behaviours instead of punishing unwanted behaviour.

[6] The execution of the training activities should incorporate interactions between learners as well as trainers through the use of group discussions, cooperative group work, whole-class interactivities and peer guidance.

[7] The programme should be designed in such a manner as to be congruent with a broader system in the organisation. The programme will be more beneficial if the organisation has other members, supervisors or peers displaying the desired behaviours (Jarvis, 2005).

Organisational members who do not have the time to attend formal training and development sessions can develop their emotional intelligence in their own time. The organisation can develop a compact disc (cd) and digital video disc (dvd) with an emotional intelligence programme on it. Then the individual can work in his or her own time and pace to access the information. The individual can then use the peer feedback system to soundboard his or her

progress. E-learning programmes (Noe et al., 2006) can be designed and made available through the internet and intranet facilities.

5.4.2 Augmenting work adjustment through developing internal locus of control

In terms of increasing work adjustment, the development of the internal locus of control of the individual within the work environment is suggested through the following:

Adapting the work of Jarvis (2005) regarding the attribution theory to the work environment, it can be postulated that supervisors and subordinates can identify individuals who make unhelpful attributions of their successes and failures and work with them to alter these attributions to be more positive and so that individuals can improve their motivation. Table 5.1 provides examples of causal inferences about success and failure.

Table 5.1

Examples of causal inferences about success and failure (Jarvis, 2005)

Success	Failure
I had good luck	I had bad luck
It was easy	It was too hard
I tried hard	I didn't even try hard enough
I'm clever	I'm not clever enough

In addition, the training and development interventions to develop internal locus of control can focus on coping skills (Brown et al., 2002), including anger management, emotional disclosure, attribution training and relaxation training.

5.4.3 Augmenting work adjustment through developing self-efficacy

The following suggestions are made in order to increase work adjustment through developing the self-efficacy of the individual within the work environment:

Training and development programmes can be designed to address the development of individuals' self-efficacy (Von Kirchenheim & Richardson, 2005). Research in the military environment also concluded that self-efficacy beliefs can be developed through a course (Samuels et al., 2010).

Supervisors and managers can increase employee motivation through recognition and reward systems as well as praise. They can also set specific goals (Bandura & Locke, 2003) and targets for employees to reach that, when achieved, will enhance self-efficacy (Jarvis, 2005) and influence the adjustment of the individual (Maddux & Lewis, 1995). These goals must be "realistic short-term goals to work towards, they can judge their self-efficacy in relation to them. There is clear evidence that, when used appropriately, setting goals or targets can enhance performance" (Jarvis, 2005, p. 129).

When attempting to increase self-efficacy, it is also important to understand the power of observational learning. Simulations and events can be created to build on employees' abilities in order to "minimise the experience of failure and maximise the experience of success" (Jarvis, 2005, p. 129).

Supervisors and managers can increase employees' self-efficacy through the following:

1. Informing personnel regarding the purpose of the training. Emphasise that the training provided is to enhance performance and not to identify areas of incompetence.
2. Prior to the training, personnel must understand the purpose of the training as well as receive as much information as practically possible regarding the content of the training.

3. Personnel can be made aware of other individuals or peers in similar posts that are successful after they have received training.

4. Learners must receive feedback to understand that learning is under their control. They must believe that they have the abilities to complete the training and it is their responsibility to surmount any challenges that occur during training (Noe et al., 2006).

5.4.4 Augmenting work adjustment through developing sense of coherence

In order to increase work adjustment through developing the sense of coherence of the individual within the work environment, the following interventions are recommended:

Sense of coherence is regarded as a developmental construct that is presumed to remain relatively stable throughout the adult life. But some adjustments in an individual's level of sense of coherence can also be expected (Antonovsky, 1993; Feldt et al., 2011; Hochwalder & Forsell, 2011). Sense of coherence develops as an individual's maturity and growth in life that can result in becoming more emotionally stable, productive and positive contributors to society (Feldt et al., 2011).

Sense of coherence also affects individuals' reflections on how to cope and adjust to everyday problems that they face (Griffiths et al., 2011). The work environment also plays a role in shaping a person's sense of coherence. If an individual can participate in decision making in the workplace, this can create a feeling of being in control and thus enhance sense of coherence. When the individual can participate in the regulation of his or her work environment, it creates a sense of meaning which enhances sense of coherence (Breed et al., 2006). This can lead to productive performance, recognition, reward and promotion which in turn will again enhance sense of coherence (Breed et al., 2006).

Managers and supervisors can influence the perception of an individual in believing they can handle a challenge based on support and participation. They can also add to the meaning the individual has in what they are doing by “involving them in the goal setting process and to a lesser degree, make the goal specific to enhance comprehensibility for the individual” (Nel et al., 2004, p. 54).

Organisations should also focus on extrinsic factors (for example rewards, remuneration and supervision) when managing employees with a low sense of coherence and factors intrinsic to the job for employees with a strong sense of coherence (Muller & Rothmann, 2009). Sense of coherence reflects a person’s capacity to respond to stressful situations (Eriksson & Lindstrom, 2005) and traumatic events (Kimhi et al., 2010; Pham et al., 2010).

This section has discussed the practical applications of the results presented in Chapter 4 and Section 5.2. This section aimed at giving some guidance and starting point for industrial psychologists, human resource managers and individuals for addressing some of the antecedents of work adjustment within the military work environment and how these antecedents can be enhanced in order for the organisation and the individual to benefit.

5.5 CONCLUSION

This chapter discussed the empirical findings in the light of other research. Thereafter practical implications of the results were presented for the development of emotional intelligence, internal locus of control, self-efficacy and sense of coherence. The next chapter concludes by providing a summary of the research. It will also highlight the limitations for the research as well as the recommendations for future research.

CHAPTER 6

CONCLUSION

6.1 SUMMARY

This chapter reiterates the motivation for this research, the research problem and the objectives aimed for in the research. The model for work adjustment within the military work environment developed throughout the research is again presented. Thereafter the limitations influencing the research are presented. The chapter concludes with recommendations for future research endeavours.

This research was motivated by the research gap of theory-based analyses of antecedents and consequences of work adjustment (see Section 1.2). Military personnel on deployments and international assignments can be regarded as the civilian equivalent of expatriates, but with the added stressors of the military work environment (see Section 1.1).

This notion is narrowed down by Huang et al., (2005, p. 1668) by stating that “further studies are needed for better clarification and identification of specific personality traits as antecedents of expatriate success”. This research gap in the antecedents of work adjustment and deployment success urged the researcher to investigate the relevance of personality traits as antecedents of successful adjustment to deployment situations within the South African military environment.

The research problem (see Section 1.3) pertains to the relevance of personality factors and work adjustment within the South African military environment. The purpose of this research was not to provide an all inclusive investigation into all antecedents of work adjustment, but to identify certain traits or constructs through a literature review that can act as antecedents. This research acts as a starting point to address the research gap, and will hopefully illicit future research on these and other possible antecedents.

This research acted as a starting point to addressing the abovementioned research gap through the development of predictors of work adjustment (see Figure 4.5) through empirical findings (see Section 4.4). It also ascertained the relevance of personality factors and work adjustment within the South African military environment. Therefore the model for work adjustment within the military environment was developed (see Section 2.4 and Figure 2.8). Emotional intelligence, self-efficacy, locus of control and sense of coherence were discussed in detail (see Section 2.4) and thereafter the possible relationships were empirically tested (see Chapters 3 and 4). This model is again presented here for the reader for easy reference (see Figure 6.1¹¹).

The main objective of this study was to conduct research and thereafter empirically evaluate the relationships between emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment (see Chapter 2) among members of the SANDF. An empirical research methodology was utilised to determine the existence of possible relationships among the identified variables on work adjustment. For the purpose of this study, the independent variables of emotional intelligence, locus of control, self-efficacy and sense of coherence were empirically tested. The dependent variable was work adjustment (see Figure 3.1).

The theoretical objective of this study was to conduct an overview of the current literature on the field of study. The existence of possible relationships between the constructs of emotional intelligence, locus of control, self-efficacy, sense of coherence and work adjustment was examined (see detailed literature review in Chapter 2). The model on work adjustment within the military environment (see Figure 6.1) was systematically developed for the purpose of this research. These objectives were answered and met. The contributions of this research were discussed (see Section 5.3) for the contributions towards theory and literature (see Section 5.3.1), practising industrial psychologists and human resource managers (see Section 5.3.2),

¹¹ Figure 6.1 is a repeat of Figure 2.8

labour policies (see Section 5.3.3), and military commanders (see Section 5.3.4).

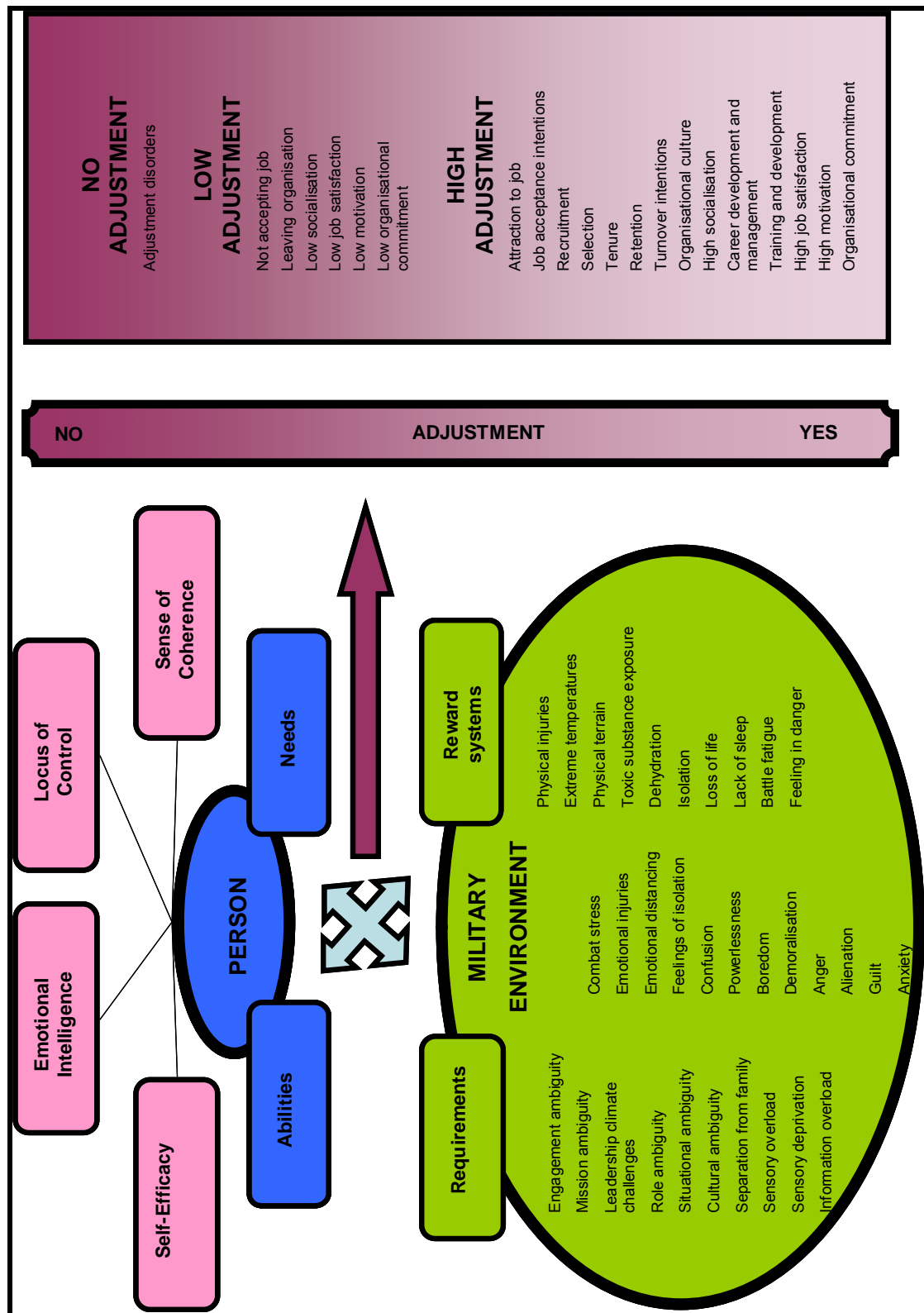


Figure 6.1 Work adjustment within the military environment

This research attempted to identify some antecedents of successful adjustment in order to suggest training or developmental interventions to the SANDF (see Section 5.3). If the SANDF can appoint military personnel with the correct profiles into deployment positions, this can decrease the costs of early termination of deployment and re-staffing of the vacant positions. Training and development interventions can be designed to ensure that deployment personnel fit the prescribed profiles. Specifically, this research attempted to add to the existing body of research by investigating the constructs of self-efficacy, locus of control, emotional intelligence and sense of coherence and their relationship with work adjustment, with specific reference to person-environment fit theory within the military work environment.

Organisations want to achieve the outcomes on the high adjustment side of the continuum (see Section 2.4 for details). Organisations also want individuals from outside the organisation to be attracted to the job, accept the job offers and stay within the organisation. Organisations need the individual to socialise well and fit into the organisational culture. Organisations want individuals to make good career development and training decisions, as well as be highly motivated and experience high levels of job satisfaction. Organisations desire individuals to be highly committed. In order to achieve these organisational outcomes, the organisation should aspire to enhance or develop emotional intelligence, self-efficacy, internal locus of control and sense of coherence. The next section discusses the limitations for this research. Thereafter, the following section will elaborate on the recommendations for future research.

6.2 LIMITATIONS

The limitations to this study have to be borne in mind while the reader is processing the implications for this study, because the limitations affect the application of the new knowledge gained. In all research limitations exist, but the researcher has to consider these when planning and conducting a

research project, as well as when interpreting the results brought forward by the research.

The management of the human resources involved in this process is difficult (Mouton, 2001). The researcher, supervisors, statisticians and a language editor all have their own time schedules. The juggling of the different time schedules, demands and expectations of each have to be administered with caution to achieve success. The number of participants in all research poses a limitation. Naturally every researcher aspires to obtain maximum participation, but due to constraints and practicalities this becomes cumbersome. This sample was a sample of convenience and due to this the researcher obtained a good sample from the population. But care should be taken when generalising results back to the general population, in this case the SANDF. This sample only includes members from the SA Army and SAMHS. No participants were from the SAAF or SA Navy.

Furthermore, consideration should be taken that the sample was a grouping already selected to participate in an operation outside the borders of South Africa, thus increasing the possible restriction of range (Gravetter & Wallnau, 2005) when doing statistical analysis. They were stationed in Bloemfontein busy with pre-deployment drills and training. It should also be noted that these members had presumably already passed their fitness, psychological and medical screening and were declared fit to deploy. This, however, does not detract from the value that this research adds to the field. This sample is representative of deployment groupings, and as such possible generalisations can be supposed to other deployment groupings.

Time constraints play a role in conducting research (Mouton, 2001). Time available on the part of the researcher as well as time available on the side of the participants was restricted. Both are full-time employed and proper time management and planning were essential in the collection of the data.

In the military environment, as with all governmental institutions, there is a lot of bureaucracy and red tape involved. This is confirmed by Esterhuysen

(2006) who stated that bureaucracy has staying power in the SANDF and will be difficult to eradicate. To get all the necessary authorities to conduct research within the SANDF and obtain access to participants took months of planning, letters, meetings, hard work, persistence and dedication.

According to Esterhuysen (2006) English language efficiency is a concern for the SANDF. English is the official language of command, but South Africa has eleven official languages and several unofficial languages. Few military members have English as a first language at home. Therefore the understanding of the English language for this research acted as a limitation. During the data collection phase, the researcher noted that language capability seemed to play a role in participants' understanding of the instruments, due to the nature of the questions asked during the process.

The level of qualification of the participants also has to be considered. Nineteen percent of the participants indicated that they have a qualification that is under the Grade 12 level. Seventy three percent of the participants indicated that they have a Grade 12 qualification. Seven percent of participants indicated some form of course, certificate or diploma obtained after Grade 12. No participants indicated a degree or post graduate degree or qualification.

The instruments utilised should be validated within South African samples. The sense of coherence scale (OLQ) especially provided some difficulty for the participants to complete (see Section 4.3). Several explanations were done on the instrument, and many questions needed answering by the researcher during the data collection phase. The author is of the opinion that language capability and understanding, as well as the scale utilised in this instrument, pose a challenge for the South African population. In another South African sample using this instrument, Van Schalkwyk and Rothmann (2008) also recommended that the OLQ items be "revisited in terms of the quality of language used. At least on face value, a number of items are plagued by language problems, for example semantics, syntax and grammar,

making it difficult for an English second-language speaker to comprehend” (Van Schalkwyk & Rothmann, 2008).

The abovementioned limitations of the study have to be considered when analysing the results and making recommendations. It is useful as an anticipatory guide for future research. The aimed contribution of the research was to act as a starting point to address the existing research gap regarding antecedents for work adjustment. Therefore, despite the limitations involved, it does not devalue the practical implications and applications of the results presented.

This research aimed to act as a starting point to address the research gap regarding the antecedents of work adjustment in the military environment (see Section 1.2). Due to the novelty of this research, existing literature and empirical findings were very limited. This research attempted to explore the research gap and breaking new ground regarding the concept of work adjustment in the South African context. It has introduced a theoretical and empirical starting point that can be useful to the business world in South Africa in general, and the military environment in particular. With these limitations in mind some recommendations for future research are made.

6.3 RECOMMENDATIONS FOR FUTURE RESEARCH

Mayer et al. (2004) emphasised that future research is needed to determine whether teaching or developing emotional knowledge will have a desirable effect on behavioural outcomes and also affect emotional intelligence itself. The impact of such training programmes, whether positive or negative, must also be empirically addressed. The development of emotional intelligence alone might not be effective, unless interventions are also implemented to address contextual and motivational factors that affect the use of emotional knowledge and skills (Salovey & Grewal, 2005).

The design and choice of training programmes for emotional intelligence are influenced by the challenges involved. When training and developing

emotional skills individual differences should at all times be respected and trainers should not make simplistic recommendations. The aim should be to expand individuals' repertoire of coping resources rather than indoctrinating individuals with a narrow set of skills (Lopes et al., 2005).

The effectiveness of emotional intelligence training programmes must still be scrupulously appraised (Lopes et al., 2005). Therefore, readers should be cautious in interpreting the practical applications of developing emotional intelligence as the alpha and omega regarding the development of emotional intelligence within the workplace. Further research and longitudinal studies are required before this application can be ascertained for certain.

Future research is also needed not only on individual emotional intelligence, but also on group emotional intelligence and its impact on the dynamics within the workplace and organisational effectiveness (Cherniss, 2001). The validation of the instruments within the South African work environment is needed. Other research can also focus on the development of unique instruments specifically designed and validated for the South African work environment.

Future research can focus on the cultural differences regarding the constructs of emotional intelligence, self-efficacy, locus of control and sense of coherence in the South African work environment. The use of psychological tests within the South African workplace remains a contentious issue due to the inequality in the South African workplace prior to 1994, and even though the current research did not make use of psychological tests per se, the validity of measures for different cultural groups (Van De Vijver & Rothmann, 2004), the cross-cultural applicability of instruments (Paterson & Uys, 2005) and multicultural instrumental design (Foxcroft, 2004) remain critical issues for future research.

Future research should focus on the other possible antecedents of work adjustment within the workplace in general, and the military work environment in particular. As stated in the definition of the problem (see Section 1.3), this

study only assessed four constructs, namely emotional intelligence, self-efficacy, locus of control and sense of coherence as antecedents to work adjustment. As confirmed in the results (see Section 4.4.2), 20 percent of the variance in the model explained work adjustment. Therefore emotional intelligence, self-efficacy, locus of control and sense of coherence explain 20 percent of the work adjustment model. Thus future research is needed to determine the other possible antecedents of work adjustment within the military environment.

6.4 CONCLUSION

This chapter reiterated the motivation for this research, the research problem and the objectives aimed for and achieved in the research. The model for work adjustment within the military work environment developed throughout the research was again presented. Thereafter the limitations influencing the research were presented. The chapter concluded with recommendations for future research endeavours. This concludes the current research on work adjustment within the military work environment. The author aimed to start addressing the current research gap and encourage researchers, academics, industrial psychologists, human resource managers and students to build on this research. Due to the author's personal fondness, gratitude and admiration, she would like to end this research with a final quote from the former president of the RSA, Mr. Nelson Rolihlahla Mandela, who stated that:

“The role of scientific knowledge is to ensure that decisions are made based on fact and knowledge rather than belief, myth or superstition.”

(Mandela, 2011, p. 234)

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