

# THE RELATIONSHIP BETWEEN LEADERSHIP DIMENSIONS, CULTURAL BELIEFS AND SALUTOGENIC FUNCTIONING

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## ABSTRACT

*The aim of this research was to investigate the relationships between employee perceptions of leadership dimensions, cultural beliefs and salutogenic functioning within a multi-cultural workforce. Inter-correlations and factor analysis of the data (N=300) identified three separate constructs, namely leadership (comprising perceptions of organisational climate, supervisory support and team work), cultural beliefs and salutogenic functioning (comprising of sense of coherence, self-efficacy, locus of control and hardiness). Many significant correlations existed between the dimensions of the three constructs. Confirmatory factor analysis showed that a model of good fit existed, confirming a structural relationship between leadership dimensions, cultural beliefs and salutogenic functioning. The nature of these relationships are discussed and recommendations are formulated towards improved individual, management, leadership and organisational development.*

## 1 INTRODUCTION

Research into leadership (Ackermann, Schepers, Lessing & Dannhauser, 2000), cultural beliefs of designated groups of employees (Booyesen, 1999) and salutogenic functioning (Antonovsky, 1987) in the work environment (Kossuth, 1998; Viviers, 1996), are becoming increasingly important, particularly in efforts to understand the organisational dynamics in South Africa. Collectively however, no recorded research could be traced regarding the relationships between these three constructs in the South African context.

Leadership seems to be influenced by employees' perceptions of the organisational climate, the type of supervisory support they receive and their

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perceptions of how teams operate in the organisation (Kossuth, 1998). Research on cultural beliefs (Booyesen, 1999) suggests that there are significant differences in those beliefs of designated groups of employees and that these preferred beliefs suggest inherent differences in preferred leadership practices (transactional versus transformational) for different cultural groups (Markus & Kitayama, 1991). In South Africa, Whites generally prefer a Euro-centric approach, characterised by individualism and rationality. On the other hand, Blacks show preference for an Afro-centric approach based on a humane orientation and collectivism known as ubuntu (Mbigi, 1997; Mbigi & Maree, 1995; Christie, Lessem & Mbigi, 1993). It is hypothesised that if leadership is congruent to the cultural beliefs of the individual and/or group, work performance will be enhanced.

Research on salutogenic orientations (Antonovsky, 1987) such as sense of coherence, self-efficacy, internal locus of control and hardiness explains the extent to which individuals are able to cope with stressful circumstances and are consequently able to perform their roles satisfactorily. Both national and international research results increasingly prove the relationship between, on the one hand salutogenic (Antonovsky, 1979, 1984) and fortigenic functioning (Strümpfer, 1995) and, on the other hand, various individual behavioural constructs and work performance. Strümpfer and Wissing (1998) gave a summary of such results measured with one of the most widely recognised salutogenic constructs and scales, namely the sense of coherence (Antonovsky, 1987). Examples of constructs being correlated with sense of coherence within the field of work behaviour, are stress, burnout, self-esteem, life satisfaction, extroversion, independence, conscientiousness, agreeableness, role behaviour, powerlessness and social support. Examples relating to the individual's organisational behaviour are job involvement, organisational commitment, powerlessness and organisational change. Especially job satisfaction has been researched extensively (Strümpfer, 1998). There is, however, very little research evidence of a relationship between salutogenic functioning and cultural beliefs.

This research paper suggests that the individual's level of functioning (studied and measured from the salutogenic paradigm), is influenced by and shows meaningful relationships with his/her perceptions of leadership (climate, supervisory support and teamwork), on the one hand, and his/her cultural beliefs, on the other. In terms of employee relations management, it is argued that the salutogenic functioning individual will demonstrate the necessary psychological strength to cope with conflict between people, be able to act constructively as leader in negotiations between factions within the organisation, and at the same time realise that different cultural beliefs could

influence people's perceptions of work performance, satisfaction and productivity in significant ways.

The central theoretical statement of this research can be formulated as follows: The individual employee who experiences the psychological atmosphere of the organisation as positive, the supervisory / managerial approach as supportive in the reaching of goals and commitments, the team as effective and co-operative, whilst operating from a positive belief system, is the individual with a high level of salutogenic functioning, manifesting in the understanding of his/her environment, the experience of emotional sense and the manageability of work demands. The problem statement underlying this research is whether positive relationships between these three constructs exist, which could help in understanding individual development, work performance and effective employee relations.

## **2 LEADERSHIP DIMENSIONS**

Leadership is based to a large extent on individuals' perceptions of organisational climate, supervisory support and teamwork (Kossuth, 1998).

### **2.1 Organisational climate (OC)**

Based on the research of Gelfand (1972), Kline and Boyd (1991), Litwin and Stringer (1968), Prakasam (1986), and Pritchard and Karasick (1973), climate is a measure of the psychological atmosphere and the measurable properties of an organisation, as perceived by employees. Litwin and Stringer (1968) found eight dimensions (or measurable properties) which satisfactorily contributed to the measurement of climate. These are organisation structure, responsibility, reward, warmth, support, standards, conflict handling and identity.

According to Fiorelli and Margolis (1993), Kottke and Sharafinski (1988) and Sorensen and Savage (1989) climate impacts on the behaviour of an individual through the style of leadership. Collins, Davis, Myers and Silk (1964), Litwin and Stringer (1968) suggest that organisational practices and procedures of an organisation impact on the climate and influence the behaviour of an individual. That climate influences the performance of an individual was researched well by Burke and Litwin (1992), as well as by Day and Bedeian (1991).

### **2.2 Supervisory support (SS)**

Supervisory support can be defined as a positive, constructive and helpful attitude of the supervisor or manager towards subordinates (Locke & Latham,

1984) towards the attainment of the goals that they are required to achieve and which impacts on goal commitment and performance (Locke, Shaw, Saari & Latham 1981). The four dimensions of supervisory support in the present research are based on House's (1981) concept of interpersonal transactions, and are classified as information support (information about the job), appraisal support (assistance in setting objectives), instrumental support (assistance with resources) and emotional support (a caring attitude). A number of researchers have found positive correlations between supervisory support and worker behaviour (Constable & Russell, 1986; Pretorius, 1993; Winnbust, Marcelissen & Kleber, 1982). Others have found significant relationships with work performance (Bandura, 1982; Carrol & Tosi, 1970; Latham & Saari, 1979). Kossuth (1998) has found significant relationships between supervisory support and teamwork.

### **2.3 Teamwork (TW)**

According to Mayo (Dyer, 1987), Trist (1981) and Varney (1989) the characteristics of sound teamwork are the following: team cohesiveness, clear member identity, leadership support, clear objectives, conflict resolution, support by leadership, team roles that are clear to each individual and to other members of the team, clear individual and team goals, clear understanding of the structure, practices, policies and systems within the team and agreement about these amongst all team members, and effective interpersonal relationships amongst team members. The dimensions that Varney (1989) used as measures of effective teamwork are clarity of team task, the effectiveness of the team processes, team performance, interpersonal relationships and team leadership. Effective teamwork is displayed when there is trust between leader and team members (Martins, 2000). The atmosphere tends to be informal with much discussion where virtually everyone participates. The objectives of the group are well understood, each member listens to the other team members, and action is taken. Dyer (1987) found that every team member who works together effectively, applies more effective ways of problem solving, planning, decision making, co-ordination, integrating resources, sharing information, and dealing with problem situations in the achievement of goals. This is supported by Boss (1991) and Buller (1986) with their research into the positive effects of team building inputs on performance.

## **3 CULTURAL BELIEFS (CB)**

House, Wright and Aditya (1997) defined culture as the common experiences of individuals which result in shared motives, values, beliefs, identities and interpretations or meanings of significant events. Tayeb (1996) defined culture as a set of values that underline attitudes and actions of members of social

groupings. In his definition of culture, Hofstede (1994) stated that culture is the collective programming of the mind which distinguishes the members of one group or category of people from another. All of the above agree that culture is a collective phenomenon because it is shared by people who live within the same social environment and cultural belief refers to the individual's orientation towards a specific dimension.

Hofstede (1994) argued that the categories upon which cultural distinctions are based include ethnic groups, genders, social classes and religious groups. He referred to these as subcultures. Dorfman (1996) maintained that there is ample evidence to suggest that cultural differences in values and beliefs are consistent with the different known management practices used in most modern organisations.

The dimensions of culture in the present research include the four bipolar dimensions originally described by Hofstede (1980) namely, individualism / collectivism, masculinity / femininity, tolerance / intolerance for uncertainty, and power stratification / equalisation. To these Hofstede (1991) added a fifth dimension namely future / present orientation. Later three more dimensions were added, namely humane / inhumane orientation (House, 1993), high / low performance orientation - which links with the McClelland's (1985) work on achievement motivation - and assertiveness / non-assertiveness - with its links with McClelland's need for power.

An important observation made by Booysen (1999) is that cultural beliefs and practices expressed in response to questionnaires are not necessarily predictive of organisational practices. Her views are based on those of House et al (1997) who maintained that forces other than cultural values and beliefs have strong influences on organisational practices. They mention in this regard economic, technological, socio-cultural and political influences. A leader's behaviour is usually in accordance with the strategic requirements of the organisation but also reflects the cultural preferences of the leader's subgroup (Booyesen, 1999), rather than the preferred cultural beliefs of employees of the organisation. This is seen as the reason why in South Africa, the leadership style of organisations still reflects the Euro-centric style and of being dominated by white males.

#### **4 SALUTOGENIC FUNCTIONING**

The salutogenic paradigm (Antonovsky, 1979; 1987; Breed, 1997) focuses on the origins of health and wellness (Latin *salus* = health and Greek *genesis* = origins). Instead of studying abnormal behaviour, the focus is on locating and developing personal and social resources and adaptive tendencies which

result in coping behaviour and growth (Cilliers, Pfeiffer & Visser, 1995). Antonovsky (1979) and Strümpfer (1990) suggested that there are four significant salutogenic strengths, namely the sense of coherence, self-efficacy (Bandura, 1989) internal locus of control (Rotter, 1990) and hardiness (Kobasa, 1982). They all form part of the relatively new positive psychology paradigm (Frederickson, 2001; Seligman & Csikszentmihalyi, 2000; Sheldon & King, 2001).

#### **4.1 Sense of coherence (SOC)**

Antonovsky (1984; 1987) defined SOC as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of coherence manifesting in the following behavioural experiences. (1) The stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable. This is called comprehensibility, where the individual makes sense of the stimuli in the environment. (2) The belief that resources are available to one to meet the demands posed by these stimuli. This is called manageability, where the individual is able to cope with the demands of the environment. (3) The belief that these demands are challenges worthy of investment and engagement. This is called meaningfulness, where the individual is able to identify emotionally and commit effort to handling these demands. Antonovsky (1979) noted that the strength of the SOC is connected to a variety of coping mechanisms which he referred to as generalised resistance resources (GRRs), defined as any characteristic of the person, the group, or the environment that can facilitate effective tension management. He identified these as artifactual which include material resources (money and wealth); cognitive - emotional - intrapersonal and emotional (knowledge, intelligence and ego identity); valuative - attitudinal - rationality, flexibility and farsightedness; interpersonal - relational (social support systems); and macro-socio-cultural for example the cultural norms and rules which control society's (including an organisation's) behaviour.

Antonovsky (1987) supported the notion that work has a significant role to play in shaping a person's SOC. A work environment which is predictable, manageable and where the employee can participate in decision making and has a voice in regulating his/her work, enhances the SOC of the worker because work is meaningful. Strümpfer supported Antonovsky's (1987) thought that work experiences strengthen the SOC. He stated, "all else being equal, I can hardly see where such an orientation to work as outlined above can lead, other than to productive performance, recognition, reward, and promotion. In turn, these experiences would become work-related GRRs that will strengthen the sense of coherence further" (1990:270).

#### **4.2 Self-efficacy (SE)**

Developed within the broad framework of social / cognitive learning theory (Bandura, 1989; Gist & Mitchell, 1992; Kirsch 1986), self-efficacy focuses on the dynamic, triadic, reciprocal, causation relationship between cognition, behaviour and the environment. It refers to the individual's belief that he/she has the capabilities to mobilise the motivational and cognitive resources, and courses of action needed to meet given situation-demands (Bandura, 1997; Wood & Bandura, 1989). The individual sets high, challenging and achievable goals, shows commitment and exercises choice and control over events in his/her life, which stimulates more success (Gist & Mitchell, 1992; Kirsch, 1986). A responsive, encouraging and rewarding environment, valuing aspirations, engagement and accomplishments, stimulates self-efficacy further and improves performance (Bandura, 1997; Barling & Beattie, 1983; Lee, 1988; Taylor, Locke, Lee & Gist, 1984).

#### **4.3 Locus of control (LOC)**

Introduced by Rotter (1966), the LOC concept derives from social learning theory with its focus on reinforcement in the acquisition of knowledge and skills. LOC is defined as the extent to which the individual perceives that he/she has control over a given situation. The differentiation between external and internal LOC lies in the experience of freedom (Antonovsky, 1991), attribution and cognitive performance (Rotter, 1966). The predominantly external individual tends to feel out of control, to see no relationship between own behaviour and events, to attribute the cause of events to the environment, others and fate, and to feel anxious, frustrated and helpless. The predominantly internal individual tends to feel in control, to see a relationship between own behaviour and outcomes, to attribute the cause of events to the self, to feel empowered and masterful and thus to experience less stress. Cognitively the internal individual acquires larger amounts and more diverse kinds of information. Work-wise, the external perceives performance as dependent on incentives, and believes that the withdrawal of these will lead to a loss in production (Erwee & Pottas, 1982). The internal perceives his/her own skill and judgement as a means to solving problems, and success not as entirely dependent on the existence or non existence of incentives (Garson & Stanwyck, 1997). He/she attends more to own self-development, shows more initiative, develops more constructive relationships with subordinates, is more participative, enterprising and achieves better results than an external (Foley & Clifton, 1990; Payne & Manning, 1988).

#### **4.4 Hardiness (HAR)**

As the salutogenic construct best known to psychologists (Strümpfer, 1990), hardiness is seen as a global personality construct that moderates stress-health relationships (Kobasa, 1979). From existential personality theory, she proposed three concepts which she regarded as being relevant to this “optimistic” orientation, namely commitment, control and challenge (Kobasa, 1982). Together, these constructs comprise the personality style of stress-resistance or hardiness.

The three concepts are defined as follows (Kobasa, 1982). Commitment (versus alienation) is a belief in the truth, importance and value of what one is and what one is doing. It is also the tendency to involve oneself actively in a number of situations in life, such as work, family, friendship and social organisations. Control (versus powerlessness) is a tendency to believe and act as if, by and large, one can influence the events of one’s life through what one imagines, says or does, with an emphasis on personal responsibility. According to Strümpfer (1990), this component partly overlaps with internal-external locus of control. Challenge (versus threat) is an expectation that change, rather than stability, is the norm in life and that change will present one with opportunities and incentives for personal development.

Persons high in hardiness easily commit themselves to what they are doing (rather than feeling alienated), generally believe that they can at least partially control events (rather than feeling powerless) and regard change to be a normal challenge or impetus to development (rather than a threat).

#### **4.5 The salutogenic profile**

Salutogenic functioning is seen as consisting of the following behaviour (see also Viviers & Cilliers, 1999). On the cognitive level, the individual is able to view stimuli from the environment in a positive and constructive manner, and to use the information towards effective decision making. On the affective level, the individual functions with self-awareness, is confident, self-fulfilled, views stimuli as meaningful and feels committed towards life in a mature manner. On the motivational level, the individual has intrinsic motivation, perceives stimuli as a challenge which directs his/her energy to cope, solve problems and achieve results. The interpersonal characteristics entail the capacity to form meaningful and rewarding relationships with others at work and in society.

## **5 AIM, DESIGN AND HYPOTHESIS**

The aim is to determine whether positive relationships exist between the above leadership dimensions, cultural beliefs and salutogenic functioning, and to ascertain the nature thereof. A survey design with quantitative measurement of and statistical analyses on the three constructs was used. The following hypotheses were tested:

H1 A positive relationship exist between the leadership dimensions (organisational climate, supervisory support and teamwork) and cultural beliefs H2 A positive relationship exist between the leadership dimensions (organisational climate, supervisory support and teamwork) and salutogenic functioning H3 A positive relationship exist between cultural beliefs and salutogenic functioning

## **6 METHOD**

### **6.1 Population and sample**

The research was conducted in a high-technology organisation. The population consisted of all the employees, from which a representative sample (N=300) was drawn. The gender ratio was 63% male / 37% female, and the race distribution 29% Black / 27% Coloured / 11% Indian / 33% White. The mean age was 30 years (SD=0,66) and qualifications ranged from N3 (matriculation) to post-graduate.

### **6.2 Measuring instruments**

The following eight measuring instruments were chosen because (1) of their conceptual congruence to the above definitions of the constructs and (2) their acceptable Cronbach alpha coefficients (which will be given in brackets) indicating the reliability of each instrument.

- Leadership - consisting of organisational climate, supervisory support and team work (three instruments)
  - The Organisational Climate Questionnaire (Kossuth,1998) measuring 14 climate dimensions namely decision making, organisational structure, role clarity, standards, conflict handling, supervision, communication, team building, responsibility, reward, job satisfaction, job tension, propensity to leave and contribution to profits. (Cronbach alpha = 0,86, Kossuth 1998)

- The Supervisory Support Questionnaire (House, 1981) measuring four dimensions namely information, appraisal, instrumental and emotional support. (Cronbach alpha = 0,96, Kossuth, 1998)
- The Teamwork Survey (Varney, 1989) measuring five dimensions namely task, process, performance, interpersonal behaviour and leadership. Although no previous standardisation data was found, this specific research showed a Cronbach alpha coefficient of 0,92, confirming the questionnaire's reliability in the present study.
- Cultural beliefs
  - The Sub-cultural Values Questionnaire (Booyesen, 1999) based on the cultural beliefs research of Hofstede (1980) and McClelland (1961), measuring eight dimensions namely uncertainty avoidance, assertiveness, gender equality, future orientation, power differentiation, collectivism, humane orientation and performance orientation. (Cronbach alpha = 0,60, Booyesen, 1999)
- Salutogenic functioning - consisting of sense of coherence, self-efficacy, locus of control and hardiness.
  - The Sense of Coherence Questionnaire (Antonovsky, 1987;1993) measuring three dimensions namely comprehension, manageability and meaningfulness. (Cronbach alpha = 0,85, Kossuth, 1998 / = 0,89, Basson & Rothmann, 2001)
  - The Self-efficacy Questionnaire (Tipton & Worthington, 1984) measuring the construct in a single score. (Cronbach alpha = 0,78, Kossuth, 1998)
  - The Locus of Control Questionnaire (Rotter, 1975) measuring internal locus of control. (Cronbach alpha = 0,65, Kossuth, 1998)
  - The Personal Views Survey (Hardiness Institute, 1985) measuring three dimensions namely commitment, control and challenge. (Cronbach alpha = 0,75, Funk, 1992)

### **6.3 Data collection**

The measuring instruments were computerised (in English and Afrikaans). The data was collected by inviting the sample to attend pre-arranged sessions during a work day in groups of 30. A psychologist who is fully trained in the appropriate computer software, administered the battery. Each session lasted approximately three and a half-hours. The computerisation ensured that each respondent answered every item.

## **6.4 Data processing**

The data was analysed by means of the Statistica (1999) Statsoft package and the following statistics are reported:

- Descriptive statistics.
- Reliability of the instruments - the Cronbach alpha coefficients. Clark and Watson (1995) and Nunnally and Bernstein (1994) suggested that a Cronbach alpha of between 0,5 and 0,6 is satisfactory for research purposes.
- Inter-correlations - Pearson-product moment correlation coefficients.
- Exploratory factor analysis. The research measured 39 observed variables through the eight measuring instruments. As a basis for establishing (close up) a model in this research, the data representing the variables were factor analysed. The orthogonal transformation matrix rotated factor pattern method was used to determine the factor structure of the variables. The retention of the factors is based on certain rule of thumb principles. For principal-components analysis, it can be argued that the Kaiser criterion of retaining factors, with eigenvalues greater than one, appears to be the most appropriate (Ford, MacCallum & Tait, 1986). Because not all statisticians agree (for example Floyd & Widaman, 1995), a commonly used rule for specifying factors was used, namely that only variables with loadings greater than 0,40 on a factor should be considered significant and used in defining a factor (Comrey, 1978).
- Confirmatory factor analysis. Because exploratory factor analysis has limited value for the specification and testing of an hypothesis relating to model structure, confirmatory factor analysis was done, allowing the researcher to specify hypotheses and providing information to determine whether the observed data confirm the hypothesised model structure. SEPATH in Statistica (1999) is used to specify and analyse such models and thereby validate the data. It measures the fit of the hypothetical model to the data (goodness-of-fit statistics) and measures and tests specific elements of the model, such as structural parameters (Browne & Cudek, 1993; Hughes, Price & Marrs, 1986; MacCallum, 1998).

## **7 RESULTS**

### **7.1 Descriptive statistics**

The descriptive statistics are reported in Table 1.

**TABLE 1: DESCRIPTIVE STATISTICS**

<b>VARIABLE</b>	<b>N</b>	<b>MEAN</b>	<b>MIN</b>	<b>MAX</b>	<b>ST DE</b>
OC 1 Decision making	300	2,770	1,200	4,600	0,651
OC 2 Organisational structure	300	3,466	1,200	5,000	0,729
OC 3 Role clarity	300	3,636	1,800	5,000	0,700
OC 4 Standards	300	3,834	2,400	5,000	0,542
OC 5 Conflict handling	300	3,231	1,000	5,000	0,713
OC 6 Supervision	300	3,528	1,400	5,000	0,781
OC 7 Communication	300	3,100	1,200	5,000	0,687
OC 8 Team building	300	3,077	1,200	4,800	0,645
OC 9 Responsibility	300	2,757	1,200	4,400	0,563
OC 10 Reward	300	2,931	1,000	5,000	0,846
OC 11 Job satisfaction	300	3,610	1,000	5,000	0,837
OC 12 Job tension	300	3,220	1,400	4,800	0,675
OC 13 Propensity to leave	300	2,296	1,000	4,800	0,850
OC 14 Contribution to profits	300	3,120	1,000	5,000	0,779
SS 1 Information	300	3,516	1,000	5,000	0,860
SS 2 Appraisal	300	3,509	1,000	5,000	0,814
SS 3 Instrumental	300	3,429	1,000	5,000	0,844
SS 4 Emotional	300	3,662	1,000	5,000	0,857
TW 1 Task	300	3,906	1,916	5,000	0,641
TW 2 Process	300	3,435	1,142	5,000	0,768
TW 3 Performance	300	3,441	1,000	5,000	0,800
TW 4 Interpersonal	300	3,631	1,272	5,000	0,731
TW 5 Leadership	300	3,443	1,111	5,000	0,751
CB 1 Uncertainty avoidance	300	4,78	2,500	7,00	0,894
CB 2 Assertiveness	300	4,141	2,250	6,500	0,803
CB 3 Gender equality	300	3,353	1,000	5,800	0,995
CB 4 Future orientation	300	4,591	2,000	7,000	0,957
CB 5 Power differentiation	300	4,163	2,000	7,000	0,799

CB 6 Collectivism	300	4,524	2,250	6,250	0,705
CB 7 Humane orientation	300	5,077	2,000	7,000	0,960
CB 8 Performance	300	4,618	2,666	6,666	0,649
SOC 1 Comprehension	300	4,236	2,454	6,545	0,730
SOC 2 Manageability	300	4,983	3,200	6,600	0,697
SOC 3 Meaningfulness	300	5,474	2,250	7,000	0,831
SE Self efficacy	300	2,714	1,407	5,185	0,554
LOC Internal	300	8,256	0,000	17,000	3,816
HAR 1 Commitment	300	3,172	1,800	3,933	0,394
HAR 2 Control	300	3,215	2,352	3,941	0,320
HAR 3 Challenge	300	2,633	1,666	3,722	0,360

## 7.2 Reliability of instruments

The Cronbach alpha coefficients and total dimensions of the eight instruments suggested that the data were reliable in that respondents tended to answer in a consistent manner:

- Leadership: Organisational climate = 0,85 / 14 dimensions; supervisory support = 0,96 / 4 dimensions; team work = 0,95 / 5 dimensions.
- Cultural beliefs = 0,50 / 8 dimensions.
- Salutogenenic functioning: SOC = 0,85 / 3 dimensions; self-efficacy = 0,80 / 1 dimension; LOC = 0,71 / 1 dimension; hardiness = 0,85 / 3 dimensions.

## 7.3 Inter-correlations

No overall significant positive correlation exists between the leadership dimensions and cultural beliefs ( $r = 0,025$ ). The significant positive correlations between the various dimensions of leadership and cultural beliefs are indicated in Table 2. Assertiveness as a cultural belief (defined as an autocratic management style) correlates negatively with eight of the leadership dimensions, namely conflict handling, team building (as climate dimensions), all four supervisory support dimensions (informational, appraisal, instrumental and emotional) as well as task and leadership (as team work dimensions). Collectivism correlates positively with eight of the leadership dimensions, namely structure, standards, job tension, and all five the team work dimensions

(task, process, performance, interpersonal and leadership); gender equality positively with five of the leadership dimensions, namely structure, communication, reward, job tension (as climate dimensions) and process (as team work dimension); future orientation positively with two of the leadership dimensions, namely role clarity and standards; performance positively with job satisfaction and negative with propensity to leave (both as climate dimensions); and uncertainty avoidance and humane orientation positively with standards (as climate dimension).

**TABLE 2: CORRELATIONS BETWEEN LEADERSHIP DIMENSIONS AND CULTURAL BELIEFS**

CULT/LEAD	CB1	CB2	CB3	CB4	CB5	CB6	CB7	CB8
OC1	0,05	-0,08	0,10	0,01	-0,01	0,08	0,01	-0,04
OC2	0,01	-0,09	0,15**	0,06	0,02	0,21***	0,10	0,02
OC3	0,01	-0,05	0,10	0,13*	-0,06	-0,03	-0,07	0,04
OC4	0,16**	-0,04	0,02	0,12*	0,01	0,14**	0,11*	0,03
OC5	0,03	-0,11*	0,09	0,04	0,01	0,01	-0,04	0,03
OC6	0,05	-0,02	0,03	0,08	0,02	0,06	-0,02	0,02
OC7	0,01	-0,08	0,12*	0,04	0,05	0,04	0,00	0,01
OC8	-0,01	-0,14**	0,10	0,03	-0,06	0,08	0,05	-0,04
OC9	-0,06	-0,07	0,06	-0,03	-0,07	-0,07	-0,09	-0,03
OC10	-0,00	-0,08	0,15**	0,02	-0,07	0,02	0,00	-0,03
OC11	0,04	-0,06	0,10	0,08	-0,07	-0,05	-0,01	0,11*
OC12	-0,00	0,05	-0,14**	-0,03	0,06	0,12**	0,10	-0,02
OC13	-0,01	-0,05	-0,04	-0,04	-0,02	0,01	0,06	-0,15**
OC14	0,07	-0,05	0,08	0,03	-0,06	0,00	-0,04	0,02
SS1	0,01	-0,11*	0,06	0,01	0,05	0,08	-0,02	0,08
SS2	0,00	-0,13*	0,03	0,02	0,01	0,05	-0,00	0,11
SS3	0,01	-0,16**	0,10	0,06	0,06	0,06	-0,04	0,08
SS4	-0,02	-0,17**	0,05	0,02	0,09	-0,01	-0,08	0,08
TW1	0,10	-0,13*	0,06	0,10	0,01	0,11*	0,07	0,06
TW2	0,09	-0,09	0,12*	0,10	0,01	0,11*	0,03	-0,02
TW3	0,08	-0,07	0,06	0,06	0,01	0,14**	0,08	-0,01
TW4	0,00	-0,09	0,04	0,05	0,03	0,13*	0,05	0,05
TW5	0,00	-0,16**	0,10	0,03	0,02	0,12*	0,02	0,06

\*p < 0.05, \*\* p< 0.01, \*\*\* p< 0.001

- **Hypothesis 1**

Firstly, this hypothesis is rejected in terms of the lack of an overall relationship between the leadership dimensions and cultural beliefs. This is supported by Booysen (1999) who maintained that cultural beliefs and practices expressed in response to questionnaires are not necessarily predictive of organisational practices. Her views were based on the findings of House et al (1997), namely that forces other than cultural values and beliefs have strong influences on organisational practices. A leader's behaviour is usually in accordance with the strategic requirements of the organisation rather than the preferred cultural beliefs of employees (Booyesen, 1999). The main finding concurs with that of Booysen (1999), namely that there is no significant link between employee's belief systems and leadership in the organisation. These seem to be two different issues. Secondly the hypothesis is not rejected in terms of the various significant relationships between the dimensions of both constructs. Organisational standards, structure and job tension, relate primarily to gender equality and collectivism, and secondary to (negative) assertiveness, to future orientation and performance. This may indicate that an employee who espouses a belief in an autocratic management style is unlikely to view supervisory support as a preferred style of leadership. This may also indicate that in an organisation operating from clear set rules and regulations, a culture develops where employees are treated equally resulting in effective performance and strategic management. Team work relating to collectivism may indicate the emergence of a traditional African non-autocratic management style based upon equality as a value.

An overall significant positive correlation exists between the leadership dimensions and salutogenic functioning ( $r = 0,35, p < 0,001$ ). The significant correlations between the various dimensions of leadership and salutogenic functioning are shown in Table 3. The three dimensions of sense of coherence correlate positively with most of the leadership dimensions and negatively with job tension and propensity to leave. Self-efficacy correlates negatively with seven of the climate dimensions (structure, role clarity, standards, conflict handling, supervision, job satisfaction and contribution to profits), supervisory appraisal support and all five the team work dimensions. Locus of control shows negative correlations with five culture dimensions namely decision making, role clarity, responsibility, job satisfaction, contribution to profits, and one team work dimensions namely task. Commitment as dimension of hardiness, correlates positively with all the leadership dimensions and negatively with job tension and propensity to leave; control correlates positively with all except for supervision and communication and negatively with job tension and propensity to leave. Challenge as dimension of hardiness shows

only four correlations namely negatively with structure and positively with role clarity, responsibility, task and interpersonal.

**TABLE 3: CORRELATIONS BETWEEN LEADERSHIP DIMENSIONS AND SALUTOGENIC CONSTRUCTS**

SAL/ LEAD	SOC1	SOC2	SOC3	SE	LOC	HAR1	HAR2	HAR3
OC1	0,25***	0,28***	0,23***	-0,07	-0,17***	0,24**	0,14**	-0,05
OC2	0,22***	0,26***	0,21***	-0,10*	-0,07	0,23***	0,13*	-0,11*
OC3	0,25***	0,31***	0,25***	-0,13*	-0,11*	0,32***	0,27***	0,11*
OC4	0,24***	0,29***	0,25***	-0,16**	-0,09	0,27***	0,19**	-0,04
OC5	0,18**	0,20***	0,16**	-0,12*	-0,09	0,26***	0,20***	-0,01
OC6	0,09	0,14**	0,18**	-0,10*	-0,03	0,14**	0,09	-0,08
OC7	0,20***	0,22***	0,13*	-0,08	-0,06	0,22***	0,18	-0,01
OC8	0,25***	0,29***	0,23***	-0,07	-0,08	0,26***	0,17**	0,02
OC9	0,21***	0,18**	0,12*	-0,08	-0,20***	0,29***	0,21***	0,18**
OC10	0,13*	0,13*	0,15**	-0,06	-0,07	0,23***	0,12*	-0,09
OC11	0,14**	0,23***	0,32***	-0,12*	-0,11*	0,32***	0,22***	0,05
OC12	-0,17**	-0,17**	-0,15**	-0,03	0,09	-0,31***	-0,16**	-0,08
OC13	-0,11*	-0,21***	-0,27***	0,09	-0,04	-0,25***	-0,11*	0,05
OC14	0,15**	0,21***	0,24***	-0,15**	-0,13*	0,28***	0,18**	0,08
SS1	0,09	0,14**	0,16**	-0,05	-0,02	0,23***	0,15**	-0,02
SS2	0,11*	0,18**	0,23***	-0,11*	-0,01	0,30***	0,21***	0,03
SS3	0,10*	0,14**	0,17**	-0,05	-0,02	0,24***	0,16**	-0,02
SS4	0,08	0,13*	0,14**	-0,05	-0,00	0,26***	0,19**	0,04
TW1	0,32***	0,40***	0,40***	-0,24***	-0,15**	0,41***	0,36***	0,13*
TW2	0,23***	0,25***	0,23***	-0,16**	-0,10	0,23***	0,16**	-0,00
TW3	0,20**	0,30***	0,26***	-0,13*	-0,06	0,29***	0,16**	0,05
TW4	0,23***	0,33***	0,27***	-0,14**	-0,09	0,35***	0,29***	0,12
TW5	0,19***	0,27***	0,25***	-0,10*	-0,06	0,30***	0,20***	0,05

\*p < .05, \*\* p< .01, \*\*\* p< .001

• **Hypothesis 2**

This hypothesis is not rejected because of the overall and dimensional significant positive relationships between the leadership dimensions and salutogenic functioning. This supports findings by Kossuth (1998) as well as findings of Strümpfer (1998), linking SOC to job satisfaction. In this regard Gist

and Mitchell (1992) and Kirsch (1986) maintained that a responsive and rewarding environment which values accomplishments, stimulates self-efficacy. Gardell and Johansson (1981) found that a person's SOC is positively modified when he/she is encouraged to exercise control over work processes. Antonovsky (1987) maintained that a work environment which is predictable where the employee can participate in decision making and has a voice in regulating his/her work, enhances the SOC of the worker because work is then experienced as meaningful. These results suggest that leadership characterised by positive work climate, good supervisory support and team work strengthens the salutogenic functioning of individuals. This is especially true for SOC (all three dimensions) and hardiness (commitment and control). In terms of the salutogenic profile it could be said that leadership style influences the individual's cognitive, affective, motivational and interpersonal behaviour.

An overall significant positive correlation exists between cultural beliefs and salutogenic functioning ( $r = 0,38$ ,  $p < 0,001$ ). The significant correlations between the various dimensions of cultural beliefs and salutogenic functioning are shown in Table 4. The three dimensions of sense of coherence show nine correlations with cultural belief - comprehension correlates positively with uncertainty avoidance and humane orientation and negatively with assertiveness; manageability positively with both future and humane orientation; meaningfulness positively with future orientation, collectivism and humane orientation and negatively with power distance. Self-efficacy shows negative correlations with five cultural beliefs dimensions and one positive with power distance. Locus of control shows a positive correlation with assertiveness. The hardiness dimensions commitment and control show four correlations - positive with future / humane / performance orientations and negative with assertiveness. Challenge shows negative correlations with uncertainty avoidance and assertiveness.

**TABLE 4: CORRELATIONS BETWEEN CULTURAL BELIEFS AND SALUTOGENENIC CONSTRUCTS**

<b>CULT BELIE/ SALU</b>	<b>CB1</b>	<b>CB2</b>	<b>CB3</b>	<b>CB4</b>	<b>CB5</b>	<b>CB6</b>	<b>CB7</b>	<b>CB8</b>
SOC1	0,14**	-0,16**	0,06	0,06	-0,04	0,06	0,19***	-0,08
SOC2	0,10	-0,09	0,04	0,13*	-0,11	0,07	0,26***	0,01
SOC3	0,07	-0,08	-0,02	0,17**	-0,15**	0,18**	0,33***	0,04
SE	-0,21***	0,03	0,01	-0,17**	0,10*	-0,18**	-0,29***	-0,10*
LOC	-0,04	0,14**	-0,04	-0,08	0,01	-0,02	-0,09	0,07
HAR1	0,01	-0,15**	0,06	0,15**	-0,09	0,01	0,15**	0,13*
HAR2	0,02	-0,15**	0,09	0,16**	-0,07	0,07	0,11*	-0,00
HAR3	-0,12*	-0,21***	0,05	0,02	-0,01	-0,07	0,04	-0,10*

\*p < .05, \*\* p< .01, \*\*\* p< .001

• **Hypothesis 3**

This hypothesis is not rejected because of the overall and dimensional significant relationships between the constructs cultural beliefs and salutogenic functioning. The negative correlations between the cultural belief assertiveness (autocratic management style) and internal LOC and hardiness suggest one's autocratic style having a negative impact on individuals' LOC and hardiness. Furthermore, the significant correlations between the cultural belief future orientation (planning for the future) with meaningfulness, commitment and self-efficacy suggest that a philosophy of planning for the future enhances one's overall levels of resilience and salutogenic functioning. A significant finding, that the cultural belief of humane orientation correlates highly significantly with SOC, self-efficacy and hardiness, suggests that a leadership style characterised by a humane approach will enhance levels salutogenic functioning. A belief in performance orientation correlates significantly with commitment, control and self-efficacy. This suggests that a person who focuses on performance and results is likely to be committed, in control of his/her destiny and will be confident because he/she is achieving results. Antonovsky (1987) maintains that certain GRRs experienced by an individual in the work place will enhance his/her levels of salutogenic functioning. Important in this regard are congruence with the valuative-attitudinal GRRs of the person, interpersonal-relational (social support systems) GRRs and the macro-socio-cultural GRRs

such as the cultural norms and rules which a person believes are important to and controls his/her behaviour. The extent to which a person's personal belief system is supported by and is congruent with the values and norms of the organisation, will impact on that person's level of salutogenic functioning. Thus one can assume from the above that an understanding of the cultural belief system of the different sub groups will go a long way to enhancing the performance of individuals in an organisation.

#### 7.4 Exploratory factor analysis

Table 5 shows the 5-factor exploratory factor analysis model (in bold). The model explains the relationship between the dimensions. It separates the leadership construct into two, namely a team building (supervisory support and teamwork) and a climate factor. It also separates the cultural beliefs construct into two, namely a transformational (gender equality, power differentiation, collectivism and humane orientation) and a transactional factor (uncertainty avoidance, assertiveness, future orientation and performance). It retains salutogenic functioning in one factor. Thus, the 5-factor model is Factor1 - Team Building, Factor 2 - Salutogenic Functioning, Factor 3 - Transformation, Factor 4 - Organisational climate and Factor 5 - Transaction.

**TABLE 5: THE 5- FACTOR EXPLORATORY FACTOR ANALYSIS MODEL**

<b>DIMENSIONS</b>	<b>F 1</b>	<b>F 2</b>	<b>F 3</b>	<b>F 4</b>	<b>F 5</b>
OC 1 Decision making	0,157	0,103	0,030	<b>0,829</b>	-0,048
OC 2 Organisational structure	0,283	0,054	0,166	<b>0,728</b>	-0,003
OC 3 Role clarity	0,283	0,220	-0,104	<b>0,551</b>	0,103
OC 4 Standards	0,295	0,131	0,219	<b>0,663</b>	0,110
OC 5 Conflict handling	0,522	0,072	-0,066	<b>0,616</b>	-0,009
OC 6 Supervision	0,602	-0,060	0,056	<b>0,518</b>	0,080
OC 7 Communication	0,411	0,018	0,006	<b>0,749</b>	-0,032
OC 8 Team building	0,385	0,156	0,102	<b>0,637</b>	-0,098
OC 9 Responsibility	0,015	0,260	-0,267	<b>0,517</b>	-0,142
OC 10 Reward	0,172	0,001	-0,057	<b>0,792</b>	0,006
OC 11 Job satisfaction	0,398	0,158	-0,171	<b>0,601</b>	0,162
OC 12 Job tension	-0,199	-0,103	0,300	<b>-0,65</b>	-0,016
OC 13 Propensity to leave	-0,324	-0,013	0,064	<b>-0,643</b>	-0,150

OC 14 Contribution to profits	<b>0,387</b>	0,134	-0,132	0,606	0,060
SS 1 Information	<b>0,827</b>	0,002	-0,047	0,296	0,030
SS 2 Appraisal	<b>0,804</b>	0,057	-0,070	0,343	0,054
SS 3 Instrumental	<b>0,843</b>	0,003	-0,101	0,305	0,060
SS 4 Emotional	<b>0,866</b>	0,015	-0,154	0,241	0,013
TW 1 Task	<b>0,620</b>	0,350	0,146	0,405	0,046
TW 2 Process	<b>0,631</b>	0,128	0,216	0,449	-0,030
TW 3 Performance	<b>0,532</b>	0,166	0,243	0,465	-0,071
TW 4 Interpersonal	<b>0,620</b>	0,275	0,227	0,269	-0,087
TW 5 Leadership	<b>0,753</b>	0,147	0,109	0,414	-0,169
CB 1 Uncertainty avoidance	-0,030	-0,019	0,415	0,072	<b>0,540</b>
CB 2 Assertiveness	-0,163	-0,286	0,010	0,028	<b>0,272</b>
CB 3 Gender equality	0,000	0,102	<b>-0,441</b>	0,142	0,090
CB 4 Future orientation	0,015	0,015	-0,010	0,038	<b>0,688</b>
CB 5 Power differentiation	0,158	-0,174	<b>0,243</b>	-0,100	-0,280
CB 6 Collectivism	0,072	0,060	<b>0,716</b>	0,022	-0,073
CB 7 Humane orientation	-0,060	0,278	<b>0,612</b>	-0,015	0,192
CB 8 Performance	0,161	0,003	-0,134	-0,100	<b>0,612</b>
SOC 1 Comprehension	-0,028	<b>0,641</b>	0,151	0,236	-0,100
SOC 2 Manageability	0,071	<b>0,757</b>	0,160	0,211	0,087
SOC 3 Meaningfulness	0,124	<b>0,668</b>	0,196	0,156	0,211
SE Self efficacy	-0,042	<b>-0,492</b>	-0,264	0,041	-0,329
LOC Internal	0,102	<b>-0,569</b>	0,016	-0,110	0,050
HAR 1 Commitment	0,226	<b>0,749</b>	-0,144	0,156	0,100
HAR 2 Control	0,179	<b>0,765</b>	-0,123	0,024	0,118
HAR 3 Challenge	0,071	<b>0,653</b>	-0,222	-0,17	-0,16
Expl.Var	6,724	4,286	2,127	7,459	1,704
Prp.Totl	0,172	0,110	0,060	0,191	0,040

**Bold** indicates significance

## 7.5 Confirmatory factor analysis

Table 6 shows the parameter estimates and structural relationships for the 5-factor (3-construct) model. All of the parameter estimates are significant with the exception of assertiveness and power differentiation as cultural belief dimensions. The model shows a reasonable fit with a Steiger-Lind RMSEA index of fit of 0,10. (A good fit = < 0,10, MacCallum, 1998)

**TABLE 6: PARAMETER ESTIMATES AND STRUCTURAL RELATIONSHIPS FOR THE FIVE-FACTOR (3-CONSTRUCT) MODEL**

FACTORS	PAR EST	STAN ERRO	T STAT	PROB. LEVEL
1 TEAM - SUPERVISION	0,568	0,039	14,666	0,000
2 TEAM - INFORMATION	0,781	0,038	20,407	0,000
3 TEAM - APPRAISAL	0,712	0,037	19,355	0,000
4 TEAM - INSTRUMENTAL	0,786	0,037	21,526	0,000
5 TEAM - EMOTIONAL	0,783	0,037	20,934	0,000
6 TEAM - TASK	0,433	0,033	13,131	0,000
7 TEAM - PROCESS	0,517	0,039	13,171	0,000
8 TEAM - PERFORMANCE	0,476	0,042	11,214	0,000
9 TEAM - INTERPERSONAL	0,421	0,039	10,781	0,000
10 TEAM - LEADERSHIP	0,611	0,041	15,061	0,000
11 SALUTOGENIC - COMPREHENSION	0,442	0,041	10,862	0,000
12 SALUTOGENIC - MANAGEABILITY	0,523	0,036	14,618	0,000
13 SALUTOGENIC - MEANINGFULNESS	0,559	0,044	12,725	0,000
14 SALUTOGENIC - INTERNAL LOC	-1,728	0,219	-7,878	0,000
15 SALUTOGENIC - COMMITMENT	0,312	0,020	15,551	0,000
16 SALUTOGENIC - CONTROL	0,247	0,017	14,911	0,000
17 SALUTOGENIC - CHALLENGE	0,190	0,021	9,049	0,000
18 SALUTOGENIC - SELF-EFFICACY	-0,264	0,032	-8,301	0,000

19 SALUTOGENIC - GENDER EQUALITY	-0,268	0,073	-3,698	0,000
20 TRANSFORMATIVE - POWER DIFFERE	0,075	0,056	1,343	0,179
21 TRANSFORMATIVE - COLLECTIVISM	0,553	0,098	5,652	0,000
22 TRANSFIORMATIVE - HUMANE ORIENT	0,546	0,105	5,225	0,000
23 CLIMATE - DECISION MAKING	0,539	0,032	16,975	0,000
24 CLIMATE - ORGANISATIONAL STRUCT	0,551	0,036	15,296	0,000
25 CLIMATE - ROLE CLARITY	0,442	0,037	11,869	0,000
26 CLIMATE - STANDARDS	0,387	0,028	13,968	0,000
27 CLIMATE - CONFLICT HANDLING	0,562	0,035	16,044	0,000
28 CLIMATE - COMMUNICATION	0,570	0,032	17,713	0,000
29 CLIMATE - TEAM BUILDING	0,474	0,033	14,505	0,000
30 CLIMATE - RESPONSIBILITY	0,286	0,032	9,070	0,000
31 CLIMATE - REWARD	0,656	0,042	15,796	0,000
32 CLIMATE - JOB SATISFACTION	0,613	0,042	14,547	0,000
33 CLIMATE - JOB TENSION	-0,459	0,035	-12,997	0,000
34 CLIMATE - PROPENSITY TO LEAVE	-0,590	0,043	-13,814	0,000
35 CLIMATE - CONTRIBUTION TO PROFITS	0,574	0,040	14,463	0,000
36 TRANSACTIONAL - UNCERTAIN AVOID	0,538	0,102	5,286	0,000
37 TRANSACTIONAL - ASSERTIVENESS	0,115	0,063	1,833	0,067
38 TRANSACTIONAL - FUTURE ORIENT	0,573	0,108	5,294	0,000
39 TRANSACTIONAL - PERFORMANCE	0,201	0,052	3,891	0,000

Table 7 shows the Steiger-Lind RMSEA index of fit for each of the measuring instruments. The findings indicate that the instruments are valid for the purpose of which they are being used. The empirical data thus seem to fit the theoretical model.

**TABLE 7: STEIGER-LIND RMSEA INDEX OF FIT FOR EACH OF THE MEASURING INSTRUMENTS**

CONSTRUCT / INSTRUMENT	RMSEA	GOODNESS OF FIT
Sense of coherence	0.08	Good fit
Self-efficacy	0.08	Good fit
Locus of control	0.05	Very good fit
Hardiness	0.06	Very good fit
Organisational climate	0.07	Good fit
Supervisory support	0.08	Good fit
Teamwork	0.07	Good fit
Cultural beliefs	0.10	Reasonable fit

The relationship between leadership dimensions and salutogenic functioning was established both in the literature review (Bandura, 1982; Burke & Litwin, 1992) and in the empirical findings. The relationship between cultural beliefs and salutogenic functioning was also established in the literature review (McClelland, 1985) and the empirical findings. In this regard, Booyesen (1999) said that Hofstede's value belief theory implies that external cultural forces influence individual values, which in turn influence behavioural intentions, which are then enacted behaviourally. Whilst no positive correlation could be established empirically between the leadership dimensions and cultural beliefs, it can be assumed that there needs to be congruence between the leadership approach in the organisation and the cultural belief systems of the individuals in order for individuals and organisation to perform effectively. Dorfman (1996) maintained that there is ample evidence to suggest that cultural differences in values and beliefs are consistent with different management practices. This suggests that a particular leadership approach is likely to be framed from the perspective of the cultural background of the leader or organisation rather than taking into account the beliefs of individual sub groups. The important point here is that the relationship between the leadership dimensions, cultural beliefs and salutogenic functioning, is intertwined. Whilst there is no apparent direct relationship between what one believes and the leadership style of the

organisation, one's cultural beliefs will be addressed to the extent that the leadership style espouses the general beliefs of all employee groups. This is the point where the model becomes closely related where the leadership style incorporates the best of the different belief systems thus satisfying sub groups whilst at the same time ensuring that the "best" style will still achieve the company goals.

## **8 CONCLUSION, LIMITATIONS AND RECOMMENDATIONS**

The present study highlighted the that both the leadership dimensions and their use in the organisation and the cultural beliefs of subgroups of individuals, will influence the ability of the individuals to cope with the demands of the work situation through their levels of salutogenic functioning. These in turn will influence performance. The purpose of a diagnostic survey such as that represented by this study, is to highlight where problems exist in the relationships between leadership dimensions, cultural beliefs and salutogenic functioning. Thereafter, interventions can be introduced to create the optimum leadership approach for the organisation that takes into account the appropriate values of the subgroups that will support the leadership style. Once this congruence is established, then there ought to be the correct ingredients to foster optimum performance in the organisation.

In terms of employee relations, the following could be concluded. The salutogenic functioning individual involved in disputes and negotiations, with its strong focus on resolving interpersonal and intergroup conflict and the facilitation of mutually accepted solutions, seems to have the necessary psychological strength to act as an objective leader, to listen effectively to various viewpoints which are always coloured by various cultural beliefs, and to create a supportive environment for effective conflict resolution. Thus the employees involved can move to higher levels of maturity, job satisfaction and productivity.

It is important to note that the research results are based on one organisation only. Whilst the sample was large enough to justify the findings in this instance it is nevertheless recommended that the research be extended to other organisations to establish if the results can generalised to other situations. Senior executives, organisation development practitioners and training managers should be enlightened about these findings so that they are in a position to look at alternative ways of improving the performance in their organisations. It is suggested that organisational development inputs take cognisance of the above relationships in the design and implementation of inputs, especially on the individual manager and leader level. It seems that the

individual's salutogenic coping skills form a solid basis for effective leadership as well as creating a supportive culture.

## REFERENCES

Ackermann, CP, Scheepers, JM, Lessing BC & Dannhauser Z. 2000. Die faktorstruktuur van Bass se leierskapsvraelys in die Suid-Afrikaanse konteks. *Journal of Industrial Psychology* 26 (2), 58-65.

Antonovsky, A. 1979. *Health, stress, and coping: New perspectives on mental and physical well-being*. San Francisco: Jossey-Bass.

Antonovsky, A. 1984. A call for a new question - salutogenesis - and a proposed answer - the sense of coherence. *Journal of Preventive Psychiatry* 22 (1), 1-11.

Antonovsky, A. 1987. *Unravelling the mystery of health: How people manage stress and stay well*. San Francisco: Jossey-Bass.

Antonovsky, A. 1991. The structural sources of salutogenic strengths. In C.L. Cooper & R. Payne (eds.). *Personality and stress. Individual differences in the stress process*, 67-104. Chichester: Wiley.

Antonovsky, A. 1993. The structure and properties of the sense of coherence scale. *Social Science and Medicine* 36 (6), 725-733.

Bandura, A. 1982. Self-efficacy mechanism in human agency. *The American Psychologist* 37 (2), 122-147.

Bandura, A. 1989. Human agency in social cognitive theory. *American Psychologist* 44 (9), 1175-1184.

Bandura, A. 1997. *Self-efficacy: The exercise of control*. New York: Freeman.  
Barling, J & Beattie, R. 1983. Self-efficacy beliefs and sales performance. *Journal of Organizational Behavior Management* 5, 41-51.

Basson, M & Rothmann, S. 2001, June. *Sense of coherence, coping and burnout of pharmacists*. Paper presented at the Annual Conference of the Society of Industrial Psychology, Pretoria.

Booyesen, AE. 1999. *An examination of race and gender influences on the leadership attributes of South African managers*. Unpublished doctoral thesis, University of South Africa, Pretoria.

Boss, WR. 1991. Team building in healthcare. *Journal of Management Development* 10 (4), 38-44.

Breed, M. 1997. *Bepalende persoonlikheidskenmerke in die salutogeniese paradigma*. Unpublished doctoral thesis, University of South Africa, Pretoria.

Browne, HW & Cudek, R. 1993. Alternative ways of assessing model fit. In KA Bolten and JS Long (Eds.), *Testing structural equation models*. Beverly Hills: Sage.

Buller, PF. 1986. Task performance relation: Some conceptual and methodological refinements. *Group and Organisation Studies* 11(3), 147-168.

Burke, WW & Litwin, GH. 1992. A causal model of organization performance and change. *Journal of Management* 18 (3), 523-545.

Carrol, JS & Tosi, HJ. 1970. Goal characteristics and personality factors in a management by objectives program. *Administrative Science Quarterly* 15, 295-304.

Christie, P, Lessem, R & Mbigi, L. 1993. *African management. Philosophies, concepts and applications*. Randburg: Knowledge Resources.

Cilliers, F, Pheiffer, J & Visser, C. 1995. *Salutogenesis as paradigm in industrial psychology*. Pretoria: Department of Industrial Psychology, UNISA.

Clark, LA & Watson, D. 1995. Constructing validity: Basic issues in objective scale development. *Psychological Assessment* 7, 309-319.

Collins, BE, Davis, HL, Myers, JG & Silk, AJ. 1964. An experimental study of reinforcement and participant satisfaction. *Journal of Abnormal and Social Psychology* 68, 463-467.

Comrey, A L. 1978. Common methodological problems in factor analytic studies. *Journal of Consulting and Clinical Psychology* 46, 648-659.

Constable, JF & Russell, DW. 1986. The effect of social support and the work environment upon burnout among nurses. *Journal of Human Stress* 12 (1), 20-26.

Day, DV & Bedeian, AG. 1991. Effects of achievement motivation and skills training on the entrepreneurial behavior of black businessmen. *Journal of Organizational Behavior and Human Performance* 14, 76-90.

Dorfman, PW. 1996. Topical issues in international Management Research. In J. Punnett & O. Shanker (Eds.), *International and cross-cultural leadership*. (pp. 267-234). Cambridge: Blackwell.

Dyer, WG. 1987. *Team building: Issues and alternatives*. Reading, MA: Addison- Wesley.

Erwee, R & Pottas, CD. 1982. Locus of control and achievement motivation of managers. *Psychologia Africana* 21, 79-102.

Fiorelli, JS & Margolis, H. 1993. Managing and understanding large systems change: Guidelines for executives and change agents. *Organisation Development Journal* 11 (3), 30-37.

Floyd, FJ & Widaman, KF. 1995. Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment* 7, 286-299.

Foley, JR. & Clifton, RA. 1990. Locus of control, organisational climate, and participation in staff development: A study of college students. *Canadian Journal of Higher Education* 20 (2), 45-59.

Ford, KJ, MacCallum, RC & Tait, M. 1986. The application of exploratory factor analysis in applied psychology. A critical review and analysis. *Personnel Psychology* 39, 291-314.

Fredrickson, BL. 2001. The role of positive emotions in positive psychology. *American Psychologist* 56 (3), 218-226.

Funk, SC. 1992. Hardiness: A review of theory and research. *Health Psychology* 11(5), 335-345.

Garson, BE & Stanwyck, DJ. 1997. Locus of Control and incentive in self managing teams. *Human Resource Development Quarterly* 8 (3), 247-258.

Gardell, B & Johansson, G. 1981. *Working life*. New York: Wiley.

Gelfand, J. 1972. *The modification, development and application of a measure of organisational climate and its relationship to higher order needs*. Unpublished masters thesis, University of the Witwatersrand, Johannesburg.

Gist, ME & Mitchell, TR. 1992. Self Efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review* 17 (2), 183-211.

Hardiness Institute. 1985. *Personal Views Survey*. Arlington Heights, IL: Author.

Hofstede, G. 1980. *Culture's consequences: International differences in work-related values*. London: Sage.

Hofstede, G. 1991. *Cultures and organisations: Software of the mind*. London: McGraw-Hill.

Hofstede, G. 1994. *Uncommon sense about organisations: cases, studies, and field observations*. London: Sage.

House, JS. 1981. *Work stress and social support*. London: Addison-Wesley.  
House, RJ. 1993. *A proposal to conduct a multi nation study of leadership and organisational practices*. Philadelphia: Unpublished document.

House, RJ, Wright, NS & Aditya, RN. 1997. Cross-cultural research on organizational leadership: A critical analysis and a proposed theory. In PC. Earley & M. Erez (Eds.) *New Perspectives on International Industry / Organizational Psychology*, (pp. 535-625). San Francisco: New Lexington Press.

Hughes, MA, Price, LR & Marrs, DW. 1986. Linking theory construction and theory testing: Models with multiple indicators of latent variables. *Academy of Management Review* 11 (1), 128-144.

Kirsch, I. 1986. Early research on self-efficacy: What we already know without knowing we knew. *Journal of Social and Clinical Psychology* 4 (3), 339-358.  
Kline, TJB & Boyd, JE. 1991. Organizational structure, context and climate: Their relationships to job satisfaction at three managerial levels. *The Journal of General Psychology* 118 (4), 305-316.

Kobasa, SC. 1979. Stressful life events, personality and health: An enquiry into hardiness. *Journal of Personality and Social Psychology* 37, 1-11.

Kobasa, SC. 1982. The hardy personality: Toward a social psychology of stress and health. In GS. Sanders & J. Suls, (Eds.), *Social psychology of health and illness*, (pp. 3-32). Hillsdale, NJ: Erlbaum.

Kossuth, SP. 1998. *Team building and salutogenic orientations contextualised in a performance model*. Unpublished doctoral thesis. University of South Africa, Pretoria.

- Kottke, J & Sharafinski, CE. 1988. Measuring perceived supervisory and organizational support. *Educational and Psychological Measurement* 48 (4), 1075-1079.
- Latham, GP & Saari, LM. 1979. Application of social-learning theory to training supervisors through behavior modelling. *Journal of Applied Psychology* 64 (3), 239-246.
- Lee, C. 1988. The effects of goal setting and monetary incentives on self-efficacy and performance. *Journal of Business and Psychology* 2 (4), 366-372.
- Litwin, GH & Stringer, RA. 1968. *Motivation and organization climate*. Cambridge, MA: Graduate School of Business Administration, Harvard University.
- Locke, EA & Latham, GP. 1984. *Goal setting: A motivational technique that works*. Englewood Cliffs: Prentice-Hall.
- Locke, EA, Shaw, KN, Saari, LM & Latham, GP. 1981. Goal setting and task performance: 1969-1980. *Psychological Bulletin* 90, 125-152.
- MacCallum, R. 1998. Commentary on quantitative methods in I-O research. *The Industrial Psychologist* 35 (4), 19-30.
- Markus, HR & Kitayama, S. 1991. Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review* 98, 224-253.
- Martins, N. 2000. Developing a trust model for assisting management driving change. *Journal of Industrial Psychology* 26 (3), 27-31.
- Mbigi, L. 1997. *Ubuntu. The African dream in management*. Randburg: Knowledge Resources.
- Mbigi, L & Maree, J. 1995. *Ubuntu. The spirit of African transformation management*. Randburg: Knowledge Resources.
- McClelland, DC. 1985. *Human motivation*. Glenview, IL: Scott, Foresman.
- McClelland, DC. 1961. *The achieving society*. New York. Van Nostrand.
- Nunnally, JC & Bernstein, IH. 1994. *Psychometric theory*. New York: McGraw-Hill.

Payne, DD & Manning, BH. 1988. The effect of cognitive self-instructional strategies on preservice teachers' locus of control. *Journal of Contemporary Educational Psychology* 13, 140-145.

Prakasam, R. 1986. Organizational climate: Development of a questionnaire measurement. *Psychological Studies* 31 (1), 51-55.

Pretorius, BT. 1993. Commitment, participation in decision-making and social support: Direct and moderating effects on the stress burnout relationship within an educational setting. *South African Journal of Psychology* 23 (1), 10-14.

Pritchard, RD & Karasick, BW. 1973. The effects of organization climate on managerial job performance and job satisfaction. *Organizational Behavior and Human Performance* 9, 126-146.

Rotter, JB. 1966. Generalized expectancies for internal versus external control of re-inforcement. *Psychological Monographs* 80 (1), 1-28.

Rotter, JB. 1975. Some problems and misconceptions related to the construct of internal vs external control of re-inforcement. *Journal of Consulting and Clinical Psychology* 43 (1), 56-67.

Rotter, JB. 1990. Internal vs external control of re-inforcement. *American Psychologist* 45 (4), 489-493.

Seligman, MEP & Csikszentmihalyi, M. 2000. Positive psychology. *American Psychologist* 55 (1), 5-14.

Sheldon, KM & King, L. 2001. Why positive psychology is necessary. *American Psychologist* 56 (3), 216-217.

Sorensen, R & Savage, G. 1989. Signalling participation through rational communication. A test of the leader interpersonal influence model. *Group and Organization Studies* 14 (3), 325-354.

Statistica. 1999. *Statistica version 5.5 1999 edition*. San Francisco: Statistica Statsoft Inc.

Strümpfer, DJW. 1990. Salutogenesis: A new paradigm. *South African Journal of Psychology* 20 (4), 265-276.

Strümpfer, DJW. 1995. The origins of health and strength: From "salutogenesis" to "fortigenesis". *South African Journal of Psychology* 25 (2), 81-89.

Strümpfer, DJW. 1998. *Sense of coherence and job satisfaction: Review of South African data*. Paper presented at annual conference of Psychological Society of South Africa, Cape Town.

Strümpfer, DJW & Wissing, MP. 1998. *Review of South African data on the sense of coherence scale as a measure of fortigenesis and salutogenesis*. Paper presented at annual congress of Psychological Society of South Africa, Cape Town.

Tayeb, MH. 1996. *The management of a multicultural workforce*. New York: Wiley.

Taylor, MS, Locke, EA, Lee, C & Gist, ME. 1984. Type A behavior and faculty research productivity: What are the mechanisms? *Journal of Organizational Behavior and Human Performance* 34, 402-418.

Tipton, RM & Worthington, EL. 1984. The measurement of generalized self-efficacy: A study of construct validity. *Journal of Personality Assessment* 48, 545-548.

Trist, E. 1981. *The evolution of socio-technical systems: A conceptual framework and an action research program*. Ottawa: Ontario Ministry of Labour.

Varney, GH. 1989. *Building productive teams*. San Francisco: Jossey-Bass.  
Viviers, AM. 1996. *Salutogenese in organisatoriese konteks*. Unpublished doctoral thesis. University of South Africa, Pretoria.

Viviers, AM & Cilliers, F. 1999. Die verband tussen salutogeniese en werksorientasie. *Journal of Industrial Psychology* 25 (1), 27-33.

Winnbust, JAM, Marcelissen, FHG & Kleber, RJ. 1982. Effects of social support in the stress-strain relationship: A Dutch sample. *Social Science and Medicine* 16, 475-482.

Wood, R & Bandura, A. 1989. Social cognitive theory of organizational management. *Academy of Management Review* 14 (3), 361-384.