CHANGE CENTERED LEADERSHIP AND VARIOUS CORRELATES

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ABSTRACT

The phenomenon of change in organisations and the organisational environment has led researchers in Scandinavia to investigate another possible leadership behaviour dimension present in contemporary leaders (Ekvall, 1991; Ekvall & Arvonen, 1991, 1994). An additional leadership behaviour dimension was identified to those identified by the Michigan and Ohio State Universities in the 1950s and 1960s. They identified specific change-oriented leadership behaviours and named it "Change-oriented" leadership behaviour. The justification for this new leadership dimension is based upon the changing circumstances within which contemporary leaders have to lead all the time. The measurement of this dimension has subsequently been repeated successfully with larger samples and in other locations within Europe. However, it has not been replicated elsewhere.

The primary objective of this study is to replicate the measurement of the three identified behavioural dimensions within a South African context to establish whether and to what extent especially the third leadership behaviour dimension exists. Ekvall's (1991) three-dimensional leadership behaviour scale was used for this purpose. The question arose to what extent change oriented leadership behaviour relates to other variables. An investigation was conducted on the relationships between change-oriented leadership behaviour and Organisation Citizenship behaviour (OCB), Emotional Intelligence (EI) and Visioning Ability. OCB was measured with the scale validated by Van Dyne, Graham and Dienesch (1994). The only available and validated scale to measure visioning ability was used (Thoms & Blasko, 1999). EI was measured with the validated scale of Rahim and Minors (personal communication, April, 2001).

All the psychometric instruments were applied to a South African sample of senior managers in a group of different companies. Exploratory and Confirmatory Factor Analysis, matching of Confirmatory Factor Analyses indices and coefficients of congruency calculations, were done on the leadership behaviour scale to minimise error variance, to test construct validity and to determine the portability to the South African cultural context.

A secondary objective was to replicate the cluster analyses done by the Scandinavians to investigate if specific leadership behaviour styles could be identified within the South African context. Thirdly, the different factors instrumental to OCB, EI and visioning ability, were analysed in relation to the three leadership dimensions by means of correlation and multiple regression. Finally, to determine differences in leadership behaviour dimensions for the sample in terms of their demographic variables N-Par One-way Analysis-of-variance was done.

This study confirms that the three-dimensional leadership behaviour structure is identifiable in the South African context. The results demonstrate that the measurement scale of Ekvall (1991) has satisfactory portability. The results also indicate significant construct validity of the three-dimensional leadership behaviour construct.

This study also replicates the finding that the three-dimensional leadership behaviour scale can be utilised to differentiate between leadership styles of individuals, based on the combination of leadership behaviours along each dimension of the 'Change, Production and Employee' (CPE) model.

Leadership behaviour dimensions correlated significantly with emotional intelligence dimensions for the leaders in this study. The change-

centred leadership behaviour sub-scale was significantly related to the Self-motivation and Empathy sub-scales and related to the Self-awareness EI sub-scale for the leader.

The three leadership behaviour dimensions showed no significant relations with visioning ability as well as OCB of the respondents.

N-Par One-way Analysis-of-variance identifies eight demographic variables as significant predictors of the level of the change-centred leader behaviour factor. Demographic variables included are: respondent's race group, the leader's hierarchical level, the respondent's hierarchical level, the leader's educational level, the leader's number of subordinates, the subordinate's number of subordinates, the leader's number of people they are directly and indirectly responsible for, and the leader's functional group.

Successful attainment of the study objectives led to several directions for future research and implications for management.

EKSERP

Die verskynsel van verandering in organisasies en die werksomgewing het daartoe gelei dat navorsers in Skandinawië die moontlikheid van 'n addisionele leierskapsgedrag dimensie vir hedendaagse leiers ondersoek het (Ekvall, 1991, Ekvall & Arvonen, 1991, 1994). 'n Nuwe leierskapsgedrag dimensie is gevind wat nie identifiseer is deur die leierskapsgedragnavorsing van beide die Michigan Staatsuniversitiet en die Ohio Staatsuniversitiet in die 1950s en 1960s nie. Die nuwe leierskapsgedragsfaktor wat identifiseer is, is die "veranderingsgeoriënteerde-leierskapsgedrag" genoem. Die regverdiging vir hierdie nuwe leierskapsdimensie word gebaseer op die veranderende omstandigdhede waarin hedendaagse leiers leiding moet gee. Die meeting van hierdie dimensie is sedertdien suksesvol herhaal met groter steekproewe in ander lande in Europa. Hierdie navorsing is egter nog nie in ander wêrelddele herhaal nie.

Die primêre doel van hierdie studie was om die Skandinawiese werk in 'n Suid-Afrikaanse konteks te herhaal om vas te stel tot watter mate hierdie derde leierskapsgedrag-dimensie bestaan. Vir hierdie doel is Ekvall (1991) se driedimensionele leierskapsgedragvraelys gebruik. Die vraag wat ontstaan het is tot watter mate veranderingsgeoriënteerde-leierskapsgedrag verband hou met ander veranderlikes. 'n Ondersoek is geloods om die verwantskappe te meet tussen veranderingsgeoriënteerde-leierskapsgedrag en organisasie burgerskapsgedrag (OBG), emosionele intelligensie (EI) en visionêre vermoë (VV) onderskeidelik. OGB is bemeet deur die skaal ontwikkel deur Dyne, Graham en Dienesch (1994). Die enigste beskikbare en geldige skaal om visionêre vermoë te meet, is

gebruik (Thoms & Blasko, 1999). Emosionele intelligensie is gemeet met die skaal van Rahim en Minors (persoonlike kommunikasie, April, 2001).

Hierdie psigometriese instrumente is toegepas op 'n Suid-Afrikaanse steekproef van senior bestuurders in 'n groep bestaande uit verskillende maatskappye. Eksploratiewe en Bevestigende Faktoranalise is gedoen en ooreenstemmingstoetsings van Bevestigende Faktoranalise-indekse en Kongruensiekoëffisiënte is bereken om die drie-dimensionele leierskapskaal te toets vir konstrukgeldigheid en om die oordraagbaarheid daarvan na die Suid-Afrikaanse kultuur te bepaal.

Die tweede doelwit was om te bepaal of die tros- of groepsanalise wat die Skadinawiese navorsers gedoen het om te bepaal of spesifieke leierskapgedragstyle bestaan, in 'n Suid-Afrikaanse konteks repliseerbaar is. Derdens is verskeie korrelasies tussen die leierskapsdimensies, OBG, EI en VV geanaliseer vir verwantskappe met die drie leierskapsdimensies deur middel van korrelasie en Veelvuldige Regressie metodes. Laastens is verskille in leierskapsgedrag-dimensies ondersoek in terme van demografiese veranderlikes met behulp van Nie-Parametriese Analise-van-Variansie metodes.

Die studie het bevestig dat die drie-dimensionele leierskapsgedragstuktuur in die Suid-Afrikaanse konteks identifiseer kan word. Die resultate het bewys dat die meetinstrument van Ekvall (1991) bevrediginde oordraagbaarheid toon. Die resultate dui ook daarop dat die drie-dimensionele leierskapsgedragkonstruk voldoende konstrukgeldigheid het.

Die studie het ook die bevinding bevestig dat die drie-dimensionele leierskapsgedrag skaal gebruik kan word om tussen leierskapstyle van

individue te kan onderskei. Hierdie onderskeid word gebaseer op kombinasies van leierskapsgedrag volgens die verskillende dimensies van die 'Verandering-, Produksie- en Werknemermodel'.

Die leierskapsgedrag-dimensies het beduidend korreleer met emosionele intelligensie dimensies vir die leiers in hierdie studie. Die veranderingsgeoriënteerde-leierskapsgedrag subskale het beduidende verwantskappe getoon met die selfmotiverings- en empatiesubskale en voldoende verwantskappe getoon met die selfbewustheidsubskaal vir die leier.

Die drie leierskapsgedrag dimensies het geen beduidende verwantskappe met visionêre vermoë en die OBG van die respondente getoon nie.

Met die toepassing van Nie-Parametriese Analise-van-Variansie is gevind dat agt demografiese veranderlikes beduidende voorspellers is van die vlak van veranderingsgeoriënteerde-leierskapsgedrag. Hierdie demografiese veranderlikes is die respondente se rassegroep, die leier se hiërargiese vlak, die leier se vlak van tersiêre opvoeding, die leier se aantal ondergeskiktes, die ondergeskikte se aantal ondergeskiktes, die aantal mense waarvoor die leier direk sowel as indirek verantwoordelik is en die leier se funksionele groep.

Die suksesvolle bereiking van die studie se doelwitte het aanleiding gegee tot voorstelle vir verskeie nuwe rigtings van toekomstige navorsing en moontlike gevolge binne organisasiebestuur.

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CHAPTER 1 - POSITIONING OF THE STUDY

1.1. Background to the study

Scientific research on leadership did not begin until the 20th century (Bass, 1981). Since then, there has been considerable research on the subject, from a variety of perspectives. For example, Van Seters and Field (1989) has reviewed the broad realm and long history of leadership theory using an evolutionary developmental approach, which allowed the grouping of many seemingly diverse leadership theories into specific and ordered categories or eras. Each new era represents a higher stage of development in leadership thought processes than the preceding era.

The rapidly changing business environment signified a clear implication to the role of leaders: to lead continuous change (Conger, Spreitzer & Lawler, 1999). A number of studies have demonstrated leadership's strategic importance in the process of change (Kotter, 1982; Bennis & Nanus, 1985; Roberts, 1985; Tichy & Devanna, 1986). Decades ago, leaders worked in steady state environments that allowed them to carefully build relationships and performance strategies. Today the challenge is to constantly adapt to rapidly changing competitive environments. The result is that leaders must learn to juggle current performance with change management (Conger, Spreitzer & Lawler, 1999).

Over the past decade and a half, academics have reached consensus that leadership involves longer-term and more adaptive challenges. They hold that the essential characteristics of leadership include the ability to challenge the status quo, engage in creative visioning for the future of the organisation, and bring about

appropriate changes in followers' values, attitudes, and behaviours through inspiration and empowerment.

Conger, Spreitzer and Lawler, (1999) maintain that there is clear agreement among academics that the key stimulus for change in contemporary business organisations is the environment. Demands for change and transformation are at an all-time high due to intense global competition, deregulation, rapid technological change, and international capital markets. Moreover, organisations that span nations and experience rapid growth through acquisitions and mergers are part of a more complex world that creates dramatic need for change. This challenges the way organisations co-ordinate activities and exchange knowledge and information. It alters the bases of competition and changes the way they add value to the market.

Kotter (1999) maintains that once the leader has formulated a compelling vision, the leader has to help followers understand the necessity of change. This is essential because it creates the motivation for employees to embrace change, implement the new visions and remain committed organisation citizens. Creating a desire for change, means communicating to employees the business case, competitive realities and then identifying major opportunities for change (Kotter, 1999). Cummings (1999) argues that an essential role for the leader is as a designer of new structures, processes, and rewards to support and encourage change.

However, from prior research on leadership, Conger, Spreitzer and Lawler, (1999) argue that we have a limited understanding of the essential leader behaviour required for effective change. Despite this criticism, over the past decade Scandinavian academics have identified a new leadership behaviour dimension in their research, called change- or development-oriented leadership

(Ekvall, 1991; Ekvall, & Arvonen, 1991, 1994; Lindell, & Rosenquist, 1992; Skogstad, & Einarson, 1999). Perhaps their work is a step towards closing this gap in our knowledge on the appropriate behaviour required by leaders in modern-day turbulent organisational environments. It may also introduce another era in the evolution of leadership theory.

The identification of this third leadership behaviour dimension in addition to the two traditional dimensions originated when Ekvall and Arvonen (1991) questioned whether it would be possible for a new leadership dimension to emerge as the conditions of organisational life unmistakably change (Ekvall, 1991). They found that in the 1980s the rate of technological development was significantly higher than it was in the 1940s and 1950s, when the major research programs of Michigan State University and Ohio State University produced the classical leadership dimensions. Change has become the natural state in modern-day organisations (Ekvall, 1991; Ekvall & Arvonen, 1991).

Another construct, emotional intelligence (EI), which has relevance to leadership behaviour in modern-day organisations, emerged in the last decade. Its applications are gaining in popularity. This is illustrated by the publication of over 30 books on EI between 1994 and 1999 (Schutte & Malouff, 1999)

Goleman (1998) claims that effective leaders are alike in one crucial way: they all have a high degree of EI. Downing (1997) points out that the growth in interest in EI is associated with increasing organisational contextual volatility and change, and points out that organisational change is frequently associated with emotional conflict. Tucker, Sojka, Barone and McCarthy (2000) concur that current changes in the work environment suggest that EI will be of increasing importance to managers in the new millennium. To deal with rapid technological

and social change, individuals need the interpersonal competencies included in the EI construct (Schmidt, 1997).

Palmer, Walls, Burgess and Stough (2001) state that the extent to which EI accounts for effective leadership is currently unknown. They found that despite much interest in relating EI to effective leadership there is little research published that has explicitly examined this relationship.

From the above discussion, it seems that both change-oriented leadership behaviour and emotionally intelligent behaviour are beneficial in leading modern-day organisations. These constructs have never been brought into relation with one another, especially in organisational contexts.

Thoms and Greenberger (1995) suggest that contemporary complex and dynamic environments necessitate particular temporal skills, such as creating future schemata and predictions, that is, a visioning ability that is well developed. Leaders who are capable of visioning and articulating schemata to achieve predictions are most appropriate for organisations in rapidly changing environments. The question arises whether leaders with a strong change-oriented behaviour (which includes a future outlook and the creation of visions of the future) will instil in their subordinates a stronger ability to visualise the future.

People in organisations exercise certain behaviours that are not normally obligatory in their day-to-day work – called organisational citizenship behaviour (OCB). These behaviours were found to contribute to the effective functioning of organisations, and consequently to their effectiveness, according to Bateman and Organ (1983). According to Podsakoff, MacKenzie, Paine and Bachrach (2000) empirical research on OCB has focused on four major categories of antecedents: individual (or employee) characteristics, task characteristics, organisational characteristics and leadership behaviours. Again, the effects of altered leadership

behaviours on subordinate OCB, which include a change-orientation and EI, have as far as could be established, never been tested in any organisational context. Such work may advance our knowledge about the kinds of behaviour that could improve or diminish positive OCB among subordinates and contribute to the effectiveness of organisations.

1.2. Definitions of Constructs used in this study

1.2.1. The meaning of leadership

1.2.1.1. Introduction

Leadership is one of the most complex and multifaceted phenomena to which organisational and psychological research has been applied (Van Seters & Field, 1989). While the term "leader" was noted as early as the 1300's (The Oxford English Dictionary, 1933) and conceptualised even before biblical times, the term leadership has been in existence only since the late 1700's (Stogdill, 1974). In earlier times, words meaning, "head of state," "military commander," "proconsul," "chief," or "king" were common in most societies; these words differentiated the ruler from other members of society (Bass, 1990). A preoccupation with leadership, as opposed to headship based on inheritance, usurpation, or appointment, occurred predominantly in countries with an Anglo-Saxon heritage. Scientific research on the topic did not begin until the 20th century (Bass, 1990). Since that time, however, there has been intensive research on the subject, addressing leadership from a variety of perspectives. For example, Bennis (1959, p. 259) stated that: "Of all the hazy and confounding areas in social psychology, leadership theory undoubtedly contends for the top nomination. And, ironically, probably more has been written and less known about leadership than about any other topic in the behavioural sciences."

Burns (1978) remarked that leadership is one of the most observed and least understood phenomena on earth. This problem arises not only in understanding the operation of the theory but also its definition. Stogdill (1974) claimed that there are almost as many definitions of leadership as those who have attempted to define the concept.

1.2.1.2. Defining Leadership

Yukl (1994) argues that the term leadership means different things to different people. It is a word taken from the common vocabulary and incorporated into the technical vocabulary of a scientific discipline without being precisely redefined. As a consequence, it carries extraneous connotations that create ambiguity of meaning (Janda, 1960). Further confusion is caused by the use of other imprecise terms such as power, authority, management, administration, control, and supervision to describe the same phenomena (Yukl, 1994). Bass (1990) corroborates this view by saying that the distinction between leadership and other social influence processes is often blurred. The many dimensions into which leadership has been cast and their overlapping meanings have added to the confusion. Therefore, the meaning of leadership may depend on the kind of institution in which it is found (Spitzberg, 1986). Bennis (1959) concluded that it seems if the concept of leadership eludes us or turns up in another form to taunt us again with its slipperiness and complexity. He states that leadership researchers have invented an endless proliferation of terms to deal with it and still the concept is not sufficiently defined.

Yukl (1994) maintains that researchers usually define leadership according to their individual perspective and the aspect of the phenomenon of highest interest to them. To illustrate the multiplicity of leadership definitions, Yukl (1994)

for example, quotes representative definitions over the last half a century as follows:

- Leadership is "the behaviour of an individual when he is directing the activities of a group toward a shared goal" (Hemphill & Coons, 1957, p. 7).
- Leadership is "interpersonal influence, exercised in a situation, and directed, through the communication process, toward the attainment of a specified goal or goals" (Tannenbaum, Weschler, & Massarik, 1961, p. 24).
- Leadership is "the initiation and maintenance of structure in expectation and interaction" (Stogdill, 1974, p. 411).
- Leadership is "the influential increment over and above mechanical compliance with the routine directives of the organisation" (Katz & Kahn, 1978, p. 528).
- Leadership is "the process of influencing the activities of an organized group toward goal achievement" (Rauch & Behling, 1984, p. 46).
- Leaders are those who consistently make effective contributions to social order, and who are expected and perceived to do so (Hosking, 1988, p. 153).
- Leadership is a process of giving purpose (meaningful direction) to collective effort, and causing willing effort to be expended to achieve purpose (Jacobs & Jaques, 1990, p. 281).

1.2.2. Selection of a leadership definition for this study

Yukl (1994) states that it is neither feasible nor desirable at this point in the development of the leadership discipline to attempt to resolve the controversies

over the appropriate definition of leadership. Like all constructs in social science, the definition of leadership is arbitrary and very subjective (Yukl, 1994). Some definitions are more useful than others are, but there is no "correct" definition. In research, the operational definition of leadership will depend to a great extent on the purpose of the researcher (Campbell, 1977; Karmel, 1978). Bass (1990) concurs that the search for the one and only proper and true definition of leadership seems to be fruitless, since the appropriate choice of definition should depend on the methodological and substantive aspects of leadership in which one is interested.

1.2.2.1. Rationale for selection of a leadership definition for this study

Since this study is focused upon changed-centred leadership behaviour, the work of Rost (1991), *Leadership for the twenty-first Century*, seemed most appropriate to utilise as the operational definition of leadership. Rost's definition is developed as a concept of leadership in the 21st-century and embodies a specific element on change oriented leadership behaviour. This is the only contemporary definition this author found in the literature that specifically articulated real change behaviours intended by leaders and followers. This difference sets the definition apart from any other leadership definitions and/or theories.

1.2.2.2. Development of Rost's (1991) definition of leadership

Rost (1991) set out to develop an understanding of the prevailing 20th century school of leadership, and to identify the definition for the new post-industrial school of leadership appropriate for the 21st century. He stipulates that previously neither the scholars nor the practitioners of leadership have been able to define leadership with precision in order to label it correctly. Additionally scholars and practitioners alike have failed to develop a readily recognisable

school of leadership that integrates the qualitative and quantitative research findings about leadership (Rost, 1991, p. 9).

Rost (1991) studied more than 300 books on definitions of leadership, written in the 1980's alone and many published materials from the 1900 to the 1970s as well as may summaries on the subject (Stogdill, 1974; Bass, 1981; Gibb; 1969). He came to the conclusion that the school of leadership developed since 1930. He argues that this school of leadership has been concealed by the apparent confusion on the subject in the literature he studied. According to him the literature conceptualises leadership as "good management" (Rost, 1991, p. 10). He named the twentieth-century school of leadership: *"Leadership as good management"* (Rost 1991, p. 94).

In summary, Rost (1991) concludes that all of these leadership writings have reflected the industrial paradigm very well. Analysed individually or in its entirety, these leadership theories have been;

- structural-functionalist,
- management-oriented,
- individualistic in focusing only on the leader,
- goal-achievement-dominated,
- self-interested and individualistic in outlook,
- male-oriented,
- utilitarian and materialistic in ethical perspective, and
- Rationalistic, technocratic, linear, quantitative, and scientific in language and methodology (Rost, 1991, p. 27).

He holds that in only one characteristic contradicts the descriptions of the industrial paradigm, that is, the inclination of concentrating on face-to-face and

small group relationships. While this characteristic is pervasive in the management frame, it is not descriptive of the industrial paradigm, which is much more oriented towards impersonal and bureaucratic relationships.

Rost (1991) concludes that the same basic understanding of leadership is embedded in the leadership definitions emanating from all the disciplines that have something to say about leadership: anthropology, history, political science, psychology, sociology, theology, and such applied sciences as business, educational, health, military, and public administration.

In his quest to develop a definition for post-industrial 21st-century leadership and under influence of Burns's (1978) definition of leadership, Rost attempted to create a new school of leadership that consistently and consciously accepts post-industrial assumptions and values.

Burns (1978, p. 425) defined leadership as the reciprocal process of mobilisation of peoples motives and values, through various economic, political and other resources, in a context of competition and conflict, in order to realise goals independently or mutually held by both leaders and followers.

Rost (1991) argued that Burns was influenced by the industrial paradigm. His own refined definition for the 21st century post-industrial paradigm of leadership is as follows: *"Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes"* (Rost 1991, p. 102).

He carefully selected every word in the definition to convey very specific meanings that contain certain assumptions and values which are necessary for a transformed, post-industrial model of leadership (Rost, 1991, p. 102).

Following is an outline of the four essential elements of his leadership definition.

1.2.2.3. Definition of Leadership: An outline

From Rost's (1991, p.103) definition, he identifies the following elements that must be present for leadership to exist, or for leadership to occur:

1. The relationship is based on influence.
   - The influence relationship is multidirectional.
   - The influence behaviours are non-coercive.
2. Leaders and followers are the people in this relationship.
   - The followers are active.
   - There must be more than one follower, and there is typically more than one leader in the relationship.
   - The relationship is inherently unequal because the influence patterns are unequal.
3. Leaders and followers intend real changes.
   - Intend means that the leaders and followers purposefully desire certain changes.
   - 'Real changes', means that the changes the leaders and followers intend must be substantive and transforming.
   - Leaders and followers do not have to produce changes for leadership to occur.
   - Leaders intend changes in the present; the changes take place in the future if they take place at all.
   - Leaders and followers intend several changes simultaneously.
4. Leaders and followers develop mutual purposes.
   - The mutuality of these purposes is forged in the non-coercive influence relationship.

- Leaders and followers develop purposes, not goals.
- The intended changes reflect, but do not necessarily realise leaders' purposes.
- The mutual purposes become common purposes.

1.2.2.4. Differences between industrial and post-industrial definitions of leadership

The third element of this definition has a particular importance to this study, since change centred leadership behaviour is the main focus of this study. This concept is derived from Burns's (1978) model of transformational leadership, but surpasses the post-industrial school of leadership (Rost, 1991, p. 114). Real, intended change was never prominent in Burns's model of leadership. The word 'intend' means that the leaders and followers purposefully desire certain changes in an organisation and/or in the society. The desire is not accidental or developed by chance. The intention is deliberate and initiated on purpose (Rost, 1991, p. 114). The leaders and followers intend changes in a present situation. The changes however, if they do take place, happen in the future, defined as any time beyond the present, and do not necessarily result from the leadership relationship. Changes may result from other factors beyond the leadership relationship. This view points to a major difference between Burns's (1978) model of leadership and the post-industrial school of leadership (Rost, 1991, p. 114).

A second difference is that the definition eliminates the notion that leadership has to result in a product - a change that is real and was intended. According to Rost (1991), Burns's (1978) view is mainly product-oriented, and to that extent his model still articulates an industrial concept of leadership. The post-industrial school of leadership proposed by Rost is process oriented. The

definition states: "Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes." Leadership is thus not limited to relationships that achieve results. Rather, leadership occurs when leaders and followers enter into a relationship that intends real changes. Leaders and followers can fail to achieve real changes and still be in a relationship called leadership.

The third difference from Burns' (1978) model of leadership is that the word change has been pluralised in Rost's (1991) definition, in contrast with the singular form that Burns used. Leaders and followers rarely, if ever, intend one change; ordinarily they intend several changes at any one time. The *plural* allows for several important ideas to be included in the new, post-industrial framework. Firstly, changes means that different people in the relationship can emphasise different but related purposes. Secondly, changes indicate that most leadership relationships have a long-term focus. When a change is actually accomplished, the change relationship need not terminate, because those involved in it ordinarily intend further changes. Thirdly, changes suggests that leaders and followers can rarely focus on only one change if they seriously intend real change; real change rarely comes in the singular. Fourthly, changes connote that the intentions regarding one or several changes may themselves change, develop maturity, be reassessed, undergo revision, even disappear as time passes. As a result, the people in the relationship reformulate their intentions.

1.2.3. Three dimensional leadership behaviour construct

Current thinking on leadership styles emphasises two major behaviour dimensions that can be classified as task-oriented and people-oriented. This two-dimensional model of leadership style which focuses on concern for people, and

concern for production, is part of a long tradition in organisational research (Fleishman, 1957a, 1957b; Stogdill & Coons, 1957; Likert, 1961; Blake & Mouton, 1978; Hersey & Blanchard, 1982).

Ekvall (1991) and Ekvall and Arvonen (1991) identified and factor-analysed a third independent leadership behaviour dimension, not identified by the classical leadership behaviour theorists. This dimension is coined change-focused or change-oriented leadership behaviour.

The first leadership behaviour dimension discussed by Ekvall (1991) reflects a situation in which the manager's behaviour gives his subordinates a sense of security. The leader is consistent, cautious and moderates conflicts. He encourages co-operation, does not seem superior but lets his employees assume responsibility and participate in decisions. As a result the climate is open, trustful and free of conflict. This dimension seemed to be like the traditional leadership dimension, called concern for people, employee-centred, consideration or human relations.

The second dimension of change-orientation relates to leaders who create visions, accept new ideas and are prepared to take risks and encourage co-operation (Ekvall, 1991). This dimension leans more towards change, the future and visioning. In this case the manager is not rigid about sticking to plans but accepts changes. The climate is described as dynamic and energetic, humorous, full of ideas promoting debate. It is a climate in which commitment and motivation are strong. The work organisation is flexible and temporary rearrangements are made when necessary. Managers who strongly exhibit this leadership style are not necessarily consistent, prone to organise or to inspire a sense of security. In certain cases the climate is open and free of conflict, but this is not necessarily true in all cases. The work organisation may allow for a clear indication of demands

and responsibilities and provide clear information about results, but then again, it may not (Ekvall, 1991).

The third behaviour dimension accords exactly with the "initiating structure" factor, also known as production-focused behaviour, identified in the Ohio State University research programme (Ekvall, 1991). This factor describes a manager who imposes order and method (i.e. structure), who is consistent and demands that action should stick to the plans. The work organisation provides for clear rules and responsibilities. Information is supplied about general decisions and results.

The three-dimensional leadership behaviour model is named the CPE model (Ekvall & Arvonen, 1991, 1994). 'C' stands for Change, 'P' stands for Production and 'E' stands for Employee.

1.2.4. Definition of Visioning Ability

Thoms and Greenberger (1995) define visioning ability as an individual's positive vivid cognitive image of an organisation, e.g., success, size, employees, strategic direction and future orientation. This concept implies that different people may have varying abilities to create images of the future (Thoms & Blasko, 1999). Hoyle (1995, p.20) defines visioning as the act of seeing and feeling alternative futures of the organisation that are either in the near (5 to 10 years), middle (10 to 20 years), or far (20 to 50 years) future.

1.2.5. Definition of Organisational Citizenship Behaviour (OCB).

Organ and his colleagues invented the term "organisational citizenship behaviour" (Bateman & Organ, 1983; Smith, Organ & Near, 1983). Organ (1988, p.4) defined organisational citizenship behaviours as individual behaviour that is discretionary, not directly or explicitly recognised by the formal reward system and that in the aggregate promotes the effective functioning of the organisation. By

discretionary, Organ (1988) means that the behaviour is not an enforceable requirement of the role or the job description, that is, the clearly specifiable terms of the person's employment contract with the organisation; the behaviour is rather a matter of personal choice, such that its omission is not generally understood as punishable.

According to Bateman and Organ (1983), these behaviours contribute to effective functioning of the organisation, and consequently to its effectiveness.

Turnipseed and Murkison (2000) maintain that commonalties of OCB include behaviours that are extra-role, entirely voluntary, constructive, not formally assigned, non-compensated, but desired by the organisation. In the last decade, Van Dyne, Graham and Dienesch (1994) found many terms have been used to describe such behaviour, including organisational citizenship behaviour, prosocial organisational behaviour, extra-role behaviour (Van Dyne & Cummings, 1990), organisational spontaneity (George & Brief, 1992), and even counter-role behaviour (Staw & Boettger, 1990).

1.2.6. Definition of Emotional Intelligence (EI)

Salovey and Mayer (1990) were the authors to coin the construct of emotional intelligence. They provided a comprehensive framework for defining emotional intelligence. First of all emotional intelligence is seen as the accurate appraisal and expression of emotion both in the self and in others. Emotional self-appraisal includes the ability to identify and categorise one's own feelings through words or facial expressions. In relation to others, empathy forms the cornerstone of emotional appraisal through gauging of feelings in others, re-experiencing those feelings, and as a result, choosing socially adaptive responses. Secondly, emotional intelligence is seen as the adaptive regulation of one's own emotions.

Lastly, emotional intelligence is considered as the ability to use emotional knowledge to solve problems.

Emotional intelligence according to Mayer and Salovey (1993, p. 433), is a type of social intelligence that involves the ability to monitor one's own and others' emotions, to discriminate among them, and to use the information to guide one's thinking and actions.

Martinez (1997, p.72) provides a more concise definition of emotional intelligence as being an array of non-cognitive skills, capabilities and competencies that influence a person's ability to cope with environmental demands and pressures.

Cooper and Sawaf (1997) defines emotional intelligence as the ability to sense, understand and effectively apply the power and acumen of emotions as a source of human energy, information, connection and influence.

Weisinger (1998, p. xvi) defines emotional intelligence as the intelligent use of emotions. In this way one intentionally use your emotions to guide your behaviour and thinking in ways that enhance desired results.

1.3. Objectives of this study

Conger, Spreitzer and Lawler (1999) stated that the rapidly changing business environment added a clear implication to the role of leaders, that is, conducting continuous change. However, they also argue from prior research on leadership, that we have a limited understanding of the important leader actions and behaviours required for effective change. The goal of this study is to contribute to scientific knowledge about change-oriented leadership behaviours and thereby increase our understanding in this field. Individuals in managerial

positions will be seen as leaders or individuals who have at least some leadership tasks.

The leadership definition of Rost (1991) is utilised as the operational definition for the purpose of this study. His is the only contemporary definition that was found in the literature that specifically articulated real change behaviours intended by leaders and followers. This rather novel definition could serve as a foundation for developing leadership theory based on change that is essential for post-industrial 21st century organisations.

The first objective of this study is the replication of the Scandinavian work on the three-dimensional leadership behaviour construct in a South African cultural context. This has as aim the revalidation and testing of the portability of the CPE scale to a South African cultural setting. It is also a step in addressing the shortcomings in our knowledge on the appropriate behaviour required by leaders in modern-day turbulent organisations, functioning in an ever-changing environment.

The second objective is to relate three additional new constructs to the three-dimensional leadership behaviour construct. The first construct is emotional intelligence, which recently gained exceptional popularity. It is claimed that effective leaders all have a high degree of EI, that the interest in EI is associated with increasing contextual change, and to deal with technological and social change, individuals need the interpersonal competencies included in EI (Dulewicz & Higgs, 2000; George, 2000). However, the extent to which EI forms part of effective leadership is currently unknown. Despite much interest in relating EI to effective leadership there is little research published that has explicitly examined this relationship. Relating leaders' EI to leaders' behaviour styles according to the

CPE model could enlighten our understanding of the relationship between leader EI and associated leader behaviour styles.

The second construct that will be related to the CPE construct is visioning ability. It is argued that leaders who are capable of visioning and articulating schemata to achieve predictions are most appropriate for organisations in rapidly changing environments. This study has as objective to determine whether leaders with a strong change-oriented behaviour according to the CPE construct (which includes a future outlook and the creation of visions of the future) might instil in their subordinates a stronger belief in their ability to visualise the future.

Finally, the construct organisational citizenship behaviour, has been identified as an important outcome of leadership behaviour (Podsakoff, MacKenzie, Paine & Bachrach, 2000). The effects of change-oriented leadership behaviour and leaders' EI, on subordinate OCB have as far as could be determined not been tested in any organisational context. Thus, another objective of this study is to verify the relationships between leader behaviour (with the CPE model) and leader EI, with subordinate's OCB. Such work may advance our knowledge about the kinds of behaviour that might improve or diminish positive OCB among subordinates, and which could therefore contribute to the effectiveness of organisations.

The objectives of this study as discussed above are schematically summarised in Figure 1.1. The solid lines show the main relationships that will be investigated. In addition, as a secondary set of objectives, the existence of relationships shown by the dashed lines will also be investigated in order to determine whether there are relationships between the visioning ability of subordinates and the EI of leaders, and the visioning ability of subordinates and the OCB of subordinates.

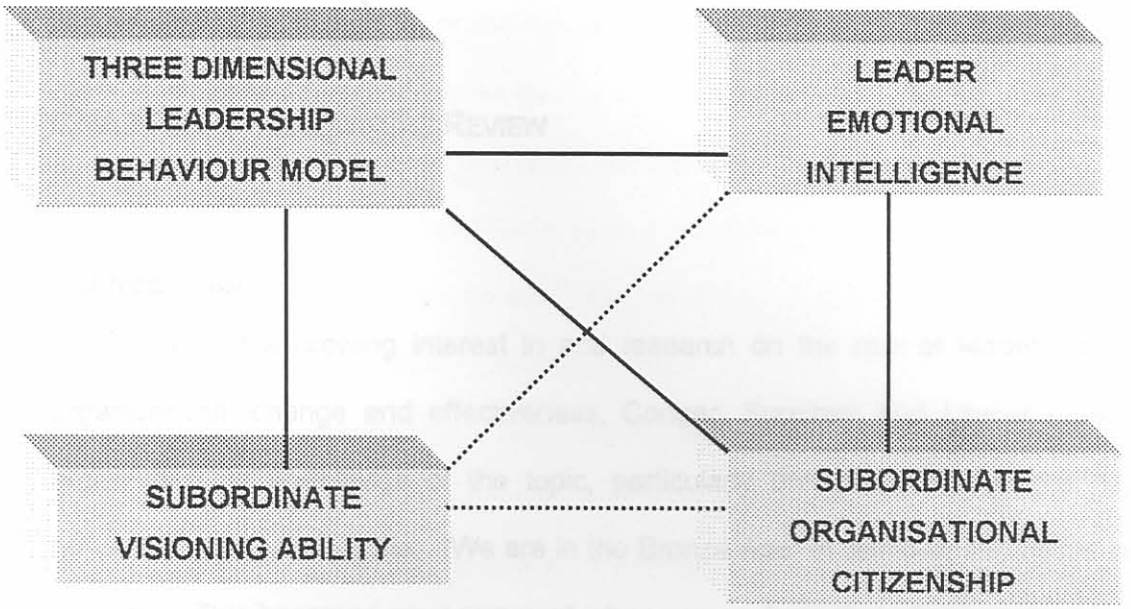

Figure 1.1 Model of relationships between constructs studied

2. CHAPTER 2 LITERATURE REVIEW

2.1. Introduction

Despite a growing interest in and research on the role of leadership in organisational change and effectiveness, Conger, Spreitzer and Lawler (1999) argue that the knowledge of the topic, particularly the leadership of change, remains limited. They state, "We are in the Bronze Age" in terms of our insight in this area. This becomes most apparent when one realizes that after two decades of research on leadership and organisational change there is no universal set of prescriptions or step-by-step formulas that leaders can use in all situations to guide change.

Almaraz (1994) could not find empirical research that focuses on the relationship between leadership and change. From prior research on leadership, Conger, Spreitzer and Lawler (1999) argue that we have a limited understanding of the key leader actions and behaviours required for effective change. While change management depends on leadership to be enacted (Eisenbach, Watson & Pillai, 1999), these researchers argue that at the time there has been little integration of these two bodies (i.e. leadership and change management) of literature.

Notwithstanding, despite these arguments, over the past decade Scandinavian academics empirically identified a new leadership behaviour dimension, called Change- or Development-oriented leadership (Ekvall, 1991; Ekvall, & Arvonen, 1991, 1994; Lindell, & Rosenquist, 1992; Skogstad, & Einarson, 1999). Perhaps their work will be a step in the direction of resolving this expressed need of integrating leadership and change management. It could also add to our

knowledge on the appropriate behaviour required by leaders in contemporary turbulent organisational environments.

In addition to the rather uncharted territory of change-oriented leadership, a few other possible related constructs were also developed in the last decade. Notably among these constructs are visioning ability, organisational citizenship behaviour (OCB) and emotional intelligence (EI).

Thoms and Greenberger (1995) argue that despite the existence of a body of literature that stresses the importance of time orientation in organisations the relationship between leadership and time orientation remains largely unexplored. They suggest that contemporary complex and dynamic environments necessitate particular temporal skills, such as creating future schemata for predicting change. This implies a well-developed visioning ability among employees.

In the field of OCB empirical research has focused on four major categories of antecedents (Podsakoff, MacKenzie, Paine & Bachrach, 2000). These are individual characteristics, task characteristics, organisational characteristics, and leadership behaviours. Podsakoff, et al. (2000) urge that future research needs to carefully investigate how and why leader behaviours influence OCBs.

The construct of emotional intelligence and its applications are gaining in popularity (Schutte & Malouff, 1999). The growth in interest in EI is associated with increasing organisational contextual volatility and change, and because organisational change is frequently associated with emotional conflict. In addition the extent to which EI accounts for effective leadership is currently unknown. Despite much interest in relating EI to effective leadership there is little research published that has explicitly examined this relationship (George, 2000).

These variables – leadership behaviour, visioning ability, organisational citizenship behaviour and emotional intelligence – seem to be potentially important

factors in current turbulent organisational environments. Further examination of the available literature covering these constructs therefore seems warranted.

2.2. Former leadership theories.

2.2.1. Introduction

Before describing the behaviour theories of leadership it is useful to place them in their context within the evolution of leadership theories. Scientific research on leadership did not begin until the 20th century (Bass, 1981). Since then, there has been considerable research on the subject, from a variety of perspectives. Van Seters and Field (1989) reviewed the broad realm of leadership theory using an evolutionary developmental approach. This made possible the grouping of many seemingly diverse leadership theories into nine specific and ordered categories. The purpose of Van Seters and Field's (1989) work was to analyse the major areas of leadership research using the taxonomy and nomenclature of evolution, and to place each major leadership research approach in evolutionary eras. Each new era represents a higher stage of development in leadership thought processes. The major leadership eras and periods are presented in Table 2.1 along with examples of particular theories (Van Seters & Field, 1989). The purpose here is to place the early leadership behaviour theories in its proper context and not to present an elaborate description of each leadership theory. It should be recognised that the various phases and theories do overlap from a chronological point of view.

Table 2.1 Evolutionary Stages of Leadership Theory

1. **Personality Era**	**Great Man Period** Great Man Theory (Bowden, 1927; Carlyle, 1841; Galton, 1869) **Trait Period** Trait Theory (Bingham, 1927)
2. **Influence Era**	**Persuasion Period** Leader Dominance Approach (Schenk, 1928) **Power Relations Period** Five Bases of Power Approach (French, 1956; French & Raven, 1959)
3. **Behaviour Era**	**Early Behaviour Period** Reinforced Change Theory (Bass, 1960) Ohio State Studies (Fleishman, Harris & Burtt, 1955) Michigan State Studies (Likert, 1961) **Late Behaviour Period** Managerial Grid Model (Blake & Mouton, 1964) Four-Factor Theory (Bowers & Seashore, 1966) Theory X and Y (McGregor, 1960, 1966) Action Theory of Leadership (Argyris, 1976) **Operant Period** (Sims, 1977; Ashour & Johns, 1983)
4. **Situation Era**	**Environment Period** Environment Approach (Hook, 1943) Open-Systems Model (Katz & Kahn, 1978) **Social Status Period** Role Attainment Theory (Stogdill, 1959) Leader Role Theory (Homans, 1959) **Socio-technical Period** Socio-technical systems (Trist & Bamforth, 1951)
5. **Contingency Era**	Contingency Theory (Fiedler, 1964, 1967) Path-Goal Theory (Evans, 1970; House, 1971) Situational Theory (Hersey & Blanchard, 1969; 1977) Multiple Linkage Model (Yukl, 1971; 1989) Normative Theory (Vroom & Yetton, 1973; Vroom & Jago, 1988)

6. **Transactional Era**	**Exchange Period** Vertical Dyad Linkage/ Leader Member Exchange Theory (Dansereau, Graen & Haga, 1975) Reciprocal Influence Approach (Greene, 1975) Emergent Leadership (Hollander, 1958) **Role Development Period** Social Exchange Theory (Hollander, 1979; Jacobs, 1970) Role-Making Model (Graen & Cashman, 1975)
7. **Anti-Leadership Era**	**Ambiguity Period** Attribution Approach (Pfeffer, 1977) **Substitute Period** Leadership Substitute Theory (Kerr & Jermier, 1978)
8. **Culture Era**	McKinsey 7-S Framework (Pascale & Athos, 1981) Theory Z (Ouchi & Jaeger, 1978, Ouchi, 1981) In Search of Excellence Approach (Peters & Waterman, 1982), Organisational Culture (Schein, 1985) Self-Leadership (Manz & Sims, 1987)
9. **Transformational Era**	**Charisma Period** Charismatic Theory (House, 1977) Transformational Leadership Theory (Burns, 1978; Bass, 1985; Tichy & DeVanna, 1986) **Self-fulfilling Prophecy Period** Self-fulfilling Prophecy Leadership Theory (Field, 1989; Eden, 1984) Performance Beyond Expectations Approach (Bass, 1985)

Note: From "The Evolution of Leadership Theory," by D. A. Van Seters and R. H. G. Field, 1989, Journal of Organizational Change Management, 3, (3), p. 30.

2.2.2. Origins of the Leadership Theories

The Personality Era included the first formal leadership theories, and represented the origin in the understanding of the leadership process (Van Seters & Field, 1989). This era is divided into the Great Man Period and the Trait Period. In the former, researchers focused on great people in the history of the world and

suggested that a person who copied their personalities and behaviours would become a strong leader. That process was hindered, however, when it became apparent that many effective leaders had widely differing personalities (e.g. Hitler, Gandhi, and King). Furthermore, personalities are extremely difficult to imitate, thereby providing little value to practising managers.

Leadership theory was advanced only slightly in the Trait Period, when attempts were made to remove the links with specific individuals and simply to develop a number of general traits, which, if adopted, would enhance leadership potential, and performance. Failure loomed again, when empirical studies revealed no single trait or group of characteristics associated with good leadership (Jenkins, 1947). The findings provided minimal value to practising leaders since most of the identified traits cannot be learned. As a result, Van Seters and Field (1989) maintain that the theories of the personality era proved to be too simplistic and have virtually become extinct. However, House and Aditja (1997) say that one needs to appreciate the limitations associated with early investigation of the phenomena. One problem they found with early trait research was that there was little empirically substantiated personality theory to guide the search for leadership traits. Consequently, there were few replicative investigations of the same traits. Also, test-measurement theory was not well developed during the time when trait studies dominated leadership research. As a result, even when common traits were studied in two or more investigations, they were usually operationalised differently (House & Aditja, 1997). The implication of trait research is that leaders with the right qualities need to be selected, since the traits of good leaders are largely innate and hence not amenable to substantial change (Bryman, 1992).

Very little information about the psychometric properties of the trait measures was reported, thus it is possible that many of the measures had limited

the behaviour of individuals in positions of authority (House & Aditja, 1997). These descriptions were then related to various criteria of leader effectiveness. In contrast to the trait theorists most leadership behaviour researchers believed that once the behaviour that leads to effective leadership is known, leaders can be trained to exhibit that behaviour, in order to become better leaders (Bryman, 1992). Two influential groups of investigators pursued the quest for explanations of leader effectiveness in this manner. These were members of the Ohio State Leadership Centre (Stogdill & Coons, 1957), and members of the Institute for Social Research at the University of Michigan (Kahn & Katz, 1960; Likert, 1961).

Research conducted within this paradigm became known as the behavioural school of leadership (House & Aditja, 1997). Leadership was thus defined as a subset of human behaviour (Hunt & Larson, 1977). House and Aditja (1997) maintain that one of the major empirical contributions from the behavioural school was the identification of two broad dimensions of leader behaviours. The dimensions were task-oriented and person-oriented behaviours, which were identified by repeated factor analyses conducted by the Ohio State group and interviews by the Michigan group. It should be noted that the Ohio researchers originally identified the two kinds of leader behaviour as "initiating structure" and "consideration". It was empirically determined that the two dimensions were statistically independent. In the Michigan studies, the two kinds of behaviour were seen as lying on a one-dimensional continuum with the behaviour of the leader varying between employee-centred and task-centred.

A second major contribution of the behavioural paradigm was a more refined and detailed specification of task- and person-oriented behaviours (House & Aditja, 1997). It was a major advancement in leadership theory not only because it enjoyed strong empirical support (e.g. Fleishman & Harris, 1962), but

validity (House & Aditja, 1997). As a consequence of the lack of theory and valid measuring instruments, both the traits studied and the way they were operationalised varied widely among investigators. Further, neither specific situational demands of leaders nor the degree to which the situation permitted the behavioural expression of personality inclinations were taken into account. Finally, according to House and Aditja (1997), trait studies were almost entirely based on samples of adolescents, supervisors and lower level managers, rather than individuals in significant positions of leadership, such as high-level managers and chief executives with overall responsibility for organisational performance.

According to Van Seters and Field (1989) the second era following the personality era was the **influence era**. This era improved on the personality era by recognising that leadership is a relationship between individuals and not a characteristic of the solitary leader. It addressed aspects of power and influence, and comprises the power relations period and the persuasion period. In the first, attempts were made to explain leader effectiveness in terms of the source and amount of power they commanded and how it was used. While power influence is certainly prevalent in today's leaders (Pfeffer, 1981), the dictatorial, authoritarian and controlling nature of this type of leadership is no longer considered effective (French, 1956). In the persuasion period coercion was removed, but the leader was acknowledged as the dominant factor in the leader-member dyad (Schenk, 1928).

2.2.3. Early Leadership Behaviour Theories.

Following the disenchantment with traits theories, there ensued a period of almost thirty years during which leaders were studied either by observing their behaviour in laboratory settings or by asking individuals in field settings to describe

also because it could easily be implemented by practising managers to improve their leadership effectiveness (Blake & Mouton, 1964). Some of the work done in this era has focused on typical behaviour patterns of leaders, while other work analysed differences in behaviours between poor and effective leaders (Yukl, 1989).

In general, theorists or researchers described leadership behaviour in terms of a relatively small number of styles or dimensions Wright (1996). Accordingly, there would be two to four styles and only one or two dimensions. However, different leadership theorists gave the behaviour dimensions of task- and people-orientation a wide variety of different names. For example, Bass (1990) lists twenty-nine different classifications for leadership behaviour and his list is by no means exhaustive. Despite the different names, however, the concepts were often very similar. In practice the vast majority of work in this area can be described in terms of two to four main styles (Wright, 1996).

The late behaviour period evolved from the early behaviour period theories by adapting them for managerial application. Probably the best known is the Managerial Grid-model which uses a 9 x 9 grid indicating considerative behaviour along one axis and initiating structure behaviour along the other (Blake & Mouton, 1964, 1978). This model suggests that the most effective leader will be rated 9 on both of these behavioural dimentions. Hersey and Blanchard (1969, 1982) based their model on apparently the same two leadership dimensions as identified in the Ohio studies - 'task-oriented' and 'relations-oriented' behaviour. The Hersey and Blanchard model takes into consideration one situational variable, named 'maturity of subordinates'. This maturity concept includes two aspects, that is: (1) job maturity, meaning capacity, ability, education and experience relevant to the task; and (2) psychological maturity, which means motivation, self-esteem and

confidence. Hersey and Blanchard prescribe that managers should be flexible in adapting their behaviour according to the maturity of the subordinates.

2.2.4. Leadership theories after the behaviour era

The operant period (Ashour & Johns, 1983; Sims, 1977) focused on the leader as the manager of reinforcements. The appropriate leader behaviour would be the reinforcement of the desired subordinate behaviours.

The situation era made a significant step forward in advancing leadership theory by acknowledging the importance of factors beyond the behaviour of the leader and the subordinate (Van Seters & Field, 1989). Examples include the type of task, the social status of the leader and subordinates, the relative position power of the leader and subordinates, and the nature of the external environment (Bass, 1981). Those situational aspects then determine the kinds of leader traits, skills, influence and behaviours that are likely to cause effective leadership.

In the environment period, leaders were thought to emerge only by being in the right place at the right time in the right circumstances; their actions were inconsequential. Under this approach the particular person in the leadership position was irrelevant, because, if he/she were to leave, someone else would simply take his/her place (Hook, 1943).

The social status period was based on the idea that, as group members undertake specific tasks, they reinforce the expectation that each individual will continue to act in a manner congruent with his or her previous behaviour. Thus, the leader's and the subordinate's roles are defined by mutually confirmed expectations of their behaviour (Stogdill, 1959). In essence the environment period focused on the task, while the social status period stressed the social aspect in a particular situation (Van Seters & Field, 1989).

A third category is the **socio-technical period** which essentially combined the environmental and social parameters (e.g. Trist & Bamforth, 1951).

The contingency era represented a major advance in the evolution of leadership theory (Van Seters & Field, 1989). In essence, effective leadership was seen as contingent or dependent on one or more of the factors of behaviour, personality, influence and/or situation. Typically, leadership approaches of that era attempted to select the situational moderator variables that best revealed which leadership style to use. The three most noteworthy theories of that era were the contingency theory (Fiedler, 1964; 1967), the path-goal theory (Evans, 1970; House, 1971; House & Mitchell, 1974) and the normative theory (Vroom & Yetton, 1973; Vroom & Jago, 1988). Fiedler's contingency theory emphasised the need to place leaders in situations most suited to them or to train the leader to change the situation to match his or her own style. House's path-goal theory addressed a different contingency. It focused less on the situation or leader behaviour, and more on the provision of enabling conditions for subordinate success (House, 1971). The normative model differed again by concentrating on which decision-making behaviour would be most appropriate, for the success of the leader (Vroom & Yetton, 1973).

Van Seters & Field (1989) argue that while the contingency approaches have generated strong empirical support as well as controversy and are still heavily utilised in contemporary leadership studies, they have substantial drawbacks. They are firstly very different from one another, so much so that it is impossible to establish distinct periods within this era. Secondly, many are too cumbersome for systematic use in day-to-day managerial practice. A computer program is, for example, necessary to aid the application of the path-goal theory of Vroom and Yetton.

The transactional era of leadership suggested that leadership resided not only in the person or the situation, but also in role differentiation and social interaction (Van Seters & Field, 1989). This theory is essentially the Influence era revisited since it addresses the influence process between the leader and subordinate. However at this stage of evolutionary development the influence process has been elevated to acknowledge the reciprocal influence of the subordinate and the leader, and the development of their relative roles over time. Examples from the **exchange period** include vertical dyad linkage theory (Dansereau, Graen & Haga, 1975), the reciprocal influence approach (Greene, 1975), and leader-member exchange theory (Dienesh & Liden, 1986). In these theories, leadership involves transactions between the leader and subordinates that affect their relationship. Also, the leader may have different types of transactions and different relationships with different subordinates.

In the role development period there still exists an element of exchange but it refers specifically to the relative roles of the leader and the subordinate (Van Seters & Field, 1989). Theories illustrative of this period are social exchange theory (Hollander, 1979; Jacobs, 1970) and the role-making model (Graen & Cashman, 1975). In these theories, the group conveys esteem and status to the leader in return for the leader's abilities in furthering goal attainment. Leadership then becomes an equitable exchange relationship, with no domination on the part of the leader or subordinate (Bass, 1981). Just as the leader acts as a role model and a creator of positive expectations, similarly the leader's behaviour can be a reaction to subordinate maturity, interpersonal skills, and competence.

During the anti-leadership era numerous empirical studies were conducted to test the various theories presented up to that point. Unfortunately the results were less than conclusive, and a sentiment arose that perhaps there was

no clear concept called leadership (Van Seters & Field, 1989). The conclusion was made that though so many variables in the leadership equation had been explained that they explained nothing at all. As the paradigm of leadership up to that time was not evaluated as being effective, there arose an era of "anti-leadership".

In the ambiguity period, it was argued that perhaps leadership is only a perceptual phenomenon in the mind of the observer (Mitchell, 1979). Pfeffer (1977) spoke of the leader primarily as a symbol, implying that actual leader performance was of little consequence.

The substitute period was a more constructive developmental phase that evolved directly out of the situational era, and attempted to identify substitutes for leadership (Van Seters & Field, 1989). Kerr and Jermier (1978) suggested that the task and the characteristics of the subordinate and the organisation could prevent leadership from affecting subordinate performance. Their work concentrated on leader substitutes and leader neutralisers in the work situation.

The culture era finally superseded the cynicism of the anti-leadership era. It was proposed that leadership is perhaps not a phenomenon of the individual, the dyad, or even the small group, but is rather omnipresent in the culture of the entire organisation (Van Seters & Field, 1989). The leadership focus changed from one of increasing the quantity of work accomplished (productivity, efficiency) to one of increasing quality (through expectations, values). This macro-view of leadership included the '7-S framework' (Pascale & Athos, 1981), the *'In Search of Excellence'* attributes (Peters & Waterman, 1982), as well as *'Theory Z'* (Ouchi, 1981; Ouchi & Jaeger, 1978). This era was a natural extension to the leader-substitute period since it suggested that, if a leader can create a strong culture in an organisation, employees will lead themselves (Manz & Sims,

1987). Once the culture is established, however, it creates the next generation of leaders. Formal leadership is needed only when the existing culture is changed and a new culture has to be created (Schein, 1985). The culture era is also seen as a descendant of the transactional era, since culture can be created by emergent leadership at lower company levels and then directed to the top levels of the organisation.

2.2.5. Transformational Leadership theories

Finally, according to Van Seters and Field (1989) the **transformational era** represents the latest phase in the evolutionary development of leadership theory. There are two periods to this era: the self-fulfilling prophecy and the charisma period (Van Seters & Field, 1989).

The self-fulfilling prophecy (SFP) period is based on recent theorising by Field (1989) on the self-fulfilling prophecy phenomenon. This research deals with the transformation of individual self-concepts, and improves on previous theories by considering the transformation as occurring from the leader to the subordinate just as much as from the subordinate to the leader. In other words, the SFP leader can be activated from lower or upper levels in the organisation. Furthermore, the process works not only in dyadic situations, but also in group and organisational contexts. That idea is elaborated in Van Seters and Field (1989) suggesting that the key success factor of this type of leadership is to build positive expectations. The task of leadership thus becomes one of building, monitoring and reinforcing a culture of high expectations.

During the charisma period the theory of leadership began to be coloured by the strategic importance of leadership in introducing change (Smircich & Morgan, 1982; Tichy & DeVanna, 1986; Conger & Kanungo, 1988; Kotter, 1990;

Bass, 1990; Bass & Avolio, 1994). Former leadership theories with a change orientation are for example, transformational, transactional and charismatic leadership (Burns, 1978; Bass, & Avolio, 1994; Tichy & Devanna, 1986; Kouzes & Posner, 1987) and visionary leadership (Sashkin & Burke, 1990; Nanus, 1992).

Briefly, according to Bryman (1992), these leadership theories indicated importance on a number of visionary leadership aspects. First, vision occupies a central position in leadership. The leader must be able to formulate a vision for the organisation that has both a qualitative and an emotional appeal to people's inner motives. Second, the leader should be able to communicate this vision to others. The leader's teaching ability, his management by symbols and his ability to be the messenger of the vision are important prerequisites. Third, the concept of empowerment plays an important part by giving people more responsibility and autonomy and making the vision a source of motivation for commitment. Fourth, the leader creates a corporate culture that is in line with the vision. This often requires an informal organisation, with formalities and bureaucracy at a minimum. Finally, the leader should have the ability to create trust and confidence. Without trust, it is more difficult to communicate the vision to co-workers.

Burns (1978) distinguished between transactional and transformational leadership, emphasizing the importance of leadership as an interactional and innovative phenomenon. Bass also distinguished between a transformational and a transactional leadership style and added a third type, namely a laissez-faire style (Bass, 1985, 1990; Bass & Avolio, 1994). According to the definition of transactional leadership given by Bass (1985), the leader adjusts to expected behaviour and rewards goal achievement. Contingent rewards are the hallmark of a transactional leader, with the leader rewarding people for the tasks performed as defined by the leader, or the goals the co-worker is expected to achieve. It has

similarities with the initiating structure dimension and theories of instrumental motivation (Arvonen, 1995). The rewards the manager offers are seen as instrumental incentives to get tasks done or to clearly define the kind of behaviour that will lead to an increase in direct rewards. The second part of transactional leadership is management by exception, in which the leader does not intervene until errors have occurred or the co-worker fails to follow the plan. Bass (1985) defines as a third category the laissez-faire leader who does not assume responsibility for either co-workers or work tasks.

According to Bass (1985) transformational leadership is capable of getting a person to define for himself higher than normal goals and also to improve his or her self-esteem to the extent that he will attempt to achieve a higher performance level. Transformational leaders motivate subordinates to commit themselves to performance that exceeds expectations (Bryman, 1992; Bass, 1990; Howell & Avolio, 1992). According to Bass, this occurs in three main ways. First, it is by raising the level of awareness of the objective of the organisation and how it is to be achieved. Second, it is to encourage co-workers to put the organisation's objective above their own personal interests. Finally the leader has to satisfy and stimulate people's higher-order needs (Bass, 1985; Bryman, 1992).

Transformational leadership consists of four basic dimensions. One is charisma, which Bass defines as providing vision and a sense of mission, instilling a sense of respect and trust (Bass, 1985; Bass & Avolio, 1994). Other components of the transformational leadership model, are inspirational leadership (communicates high expectations), individualised consideration (gives personal attention to followers and their needs, trusting and respecting them), and intellectual stimulation (providing new ideas which challenge followers).

Kouzes and Posner (1987) were also influenced by Burns's work. However, rather than having people describe great leaders and then using those descriptions to construct a questionnaire, they asked managers to write detailed memoirs of their own greatest, most positive leadership experience (Sashkin & Rosenbach, 1993). These "personal best" cases were analysed to identify common threads. Only then did the researchers begin to construct questions about leadership behaviour (Kouzes & Posner, 1987).

Kouzes and Posner, like Bass, developed an extensive list of questions. They asked hundreds of managers to answer these questions, describing exceptional leaders they had known personally (instead of concentrating on great leaders in history, as did Bass). Kouzes and Posner examined these responses using Factor Analyses. They identified five clear factors (Sashkin & Rosenbach, 1993). Each factor is briefly described as:

- **Challenging the process:** searching for opportunities and experimenting, taking sensible risks to improve the organisation.
- **Inspiring a shared vision:** focused on what leaders actually do to construct future visions and build follower support for the vision.
- **Enabling others to act:** leaders enable followers to take action by fostering collaboration (as opposed to competition) and supporting followers in their personal development.
- **Modelling the way:** leaders set examples through their own behaviours. Leaders also help followers focus on step-by-step accomplishments of large-scale goals, making those goals seem more realistic and attainable.
- **Encouraging the heart:** leaders recognise followers' contributions and find ways to aknowledge their achievements.

The five practices of exemplary leadership identified by Kouzes and Posner are, in the view of Sashkin and Rosenbach (1993), much more specific and

behaviourally focused than the transformational leadership dimensions developed by Bass.

In addition to the Bass (1985) and Kouzes and Posner (1987) work, three other lines of research have contributed to the understanding of transformational leadership. These are the research of Bennis and Nanus (1985), the work of Tichy and DeVanna (1986), and the visionary leadership theory of Sashkin (1988). The methods used by these researchers to collect data were quite similar. They simply identified a number of leaders at large corporations and interviewed them, using a relatively unstructured open-ended question-answer format.

2.2.6. Critique on transformational leadership theory

Bryman (1992) argues that transformational leadership theories lack conceptual clarity. According to him, because the theory covers such a wide range, including creation of a vision, motivating, building trust, giving support, and acting as a social architect, to name a few, it is difficult to define clearly the parameters of transformational leadership. Furthermore, the parameters of transformational leadership often overlap with other similar conceptualisations of leadership. For example, Bryman (1992) points out that transformational and charismatic leadership are often treated synonymously even though in some models of leadership (e.g. Bass, 1985) charisma is only one component of transformational leadership.

Another difficulty with transformational leadership is that it is often interpreted too simplistically as an 'either-or' approach and not as a matter of degree. There is a tendency to fail to see transformational leadership as occurring along a continuum that incorporates several components of leadership (Bryman, 1992).

A third criticism is that transformational leadership treats leadership as a personality trait or personal predisposition rather than a behaviour in which people can be instructed (Bryman, 1992).

A fourth criticism is that transformational leadership is elitist and anti-democratic (Howell & Avolio, 1992). Transformational leaders often play a direct role in creating changes, establishing a vision, and advocating new directions.

Fifth, transformational leadership is based primarily on qualitative data collected from leaders who were very visible, serving in positions that were at the top of their organisations (Bryman, 1992). As Bryman points out, the data apply to leadership *of* organisations but not necessarily leadership *in* organisations. For example, can transformational leadership be applied equally to plant managers and chief executive officers? Can supervisors and department heads learn about leadership from a model that was constructed from interviews with senior corporate leaders? Bryman (1992) reports that Bass (1985) and his associates have begun to describe findings from quantitative studies of leaders at all levels that substantiate the assumptions of transformational leadership. However, until more data are available, the questions remain to what degeree transformational leadership applies to lower level organisational leaders.

Finally, Eisenbach, Watson and Pillai (1999) argue that research in the leadership area supports the idea that transformational leadership is better for *non-routine situations*, such as major organisational transformations, large scale re-engineering programs, mergers and acquisitions (Bass, 1985).

2.2.7. Conclusions on the evolution of leadership theory

Van Seters and Field (1989) conclude their evolutionary model by noting that previous eras of leadership theory have all suffered from eventual

disillusionment and discouragement. They propose that it is probable that the next era will add further variables that will broaden our understanding of leadership, while retaining theoretical constructs and linkages that are now well understood. Perhaps, according to them, in future years it will be called the 'Integrative Era', with theories explaining leadership and organisational structural factors, complex technologies, fast-paced change, multiple decision arenas, widely dispersed players, multicultural contexts and extensive political activity. Van Seters and Field (1989) assert that what is required is a conceptual integrating framework which ties the different approaches together, and makes possible the development of a comprehensive, sustaining theory of leadership.

2.3. Three-dimensional Leadership Behaviour

2.3.1. Introduction

Recently Scandinavian researchers have identified a new leadership behaviour dimension in their research, called Change- or Development-centered leadership (Ekvall, 1991; Ekvall & Arvonen, 1991, 1994; Lindell & Rosenquist, 1992; Skogstad & Einarson, 1999). A discussion of the origin of the change-centered leadership behaviour dimensions (the CPE model), follows.

2.3.2. Origin of the Change-centred leadership behaviour dimension

The identification of a third leadership behaviour dimension in addition to the two traditional dimensions originated when Ekvall (1991) questioned the possibility of the existence of an additional leadership behaviour dimension, as the conditions of working life unmistakably change over time.

Ekvall and Arvonen (1991) argued that in the 1980s the rate of technological development was significantly higher than it was in the 1940s and 1950s, when the major research programs of Michigan State University and Ohio

State University produced the classical leadership dimensions. Fufthermore, it is argued that international competition is currently much greater resulting in the competitive status of companies needing to change suddenly and dramatically. The values held by large groups of the population are also more likely to change rapidly and noticeably due to the influence of international media and the generally higher level of education (Ekvall, 1991; Ekvall & Arvonen, 1991). Change has therefore become a common phenomenon in organisations (Ekvall, 1991; Ekvall & Arvonen, 1991).

Ekvall and Arvonen (1991) argue that business leaders started to spend more time scanning the world around them, hoping to catch the winds of change in good time. The presence in the organisation of a leadership alert to change and open to new ideas, will affect leader behaviour patterns throughout the institution. The continual state of change affects all parts of the organisation, and all levels in the hierarchy. Types of leader behaviour that have not previously been relevant therefore evolve to meet the demands of the new situation. These behaviours create leadership styles that were not necessary earlier (Ekvall, 1991; Ekvall & Arvonen, 1991).

Given these changing conditions, Ekvall and Arvonen (1991) hypothesised the existence of a leadership style adapted to creating and supporting renewal. A Factor Analysis supported this hypothesis. This study by Ekvall and Arvonen (1991) was the by-product of an organisational analysis made in four independent divisions of a medium-sized Swedish company in the chemical industry. The analyses were based on qualitative data (interviews, direct observations and a survey of documents) and on quantitative measures such as rating scales (Ekvall, 1991). A total of 130 people, which included all the supervisors and white-collar

workers in the four divisions, excluding divisional managers, answered four different questionnaires (Ekvall, 1991):

- A climate scale, consisting of about 70 questions about the emotional atmosphere in the department to which the respondent belonged.
- Leadership descriptions, consisting of about 50 statements on leadership behaviour.
- A structure scale consisting of 40 questions about formal aspects of the organisation in the department: degree of centralisation, bureaucracy complexity, planning and so on.
- A satisfaction questionnaire containing three items: satisfaction with the job, with the boss and with co-workers.

The Factor Analysis was based on an extract of 38 questions from the above questionnaires (Ekvall, 1991).

Ekvall (1991) points out that as a basis for a Factor Analysis their material suffered various shortcomings, as it was not collected for that purpose. Firtsly, the number of observations was too low (N=130) in relation to the number of variables (38). Secondly, there were several variable interdependencies, since several people evaluated each department and each department manager, and all these evaluations are included in the analysis. It was thus an analysis at the level of the individual, whereas the results are interpreted in organisational terms (Ekvall, 1991).

Nonetheless, the Factor Analysis produced three strong factors which are consistent and accessible to interpretation (Ekvall, 1991). These factors are described in the order in which they occurred in the analysis.

The first factor reflected a situation in which the manager's behaviour gives his subordinates a sense of security: he is consistent, cautious and conflict

moderating. He encourages co-operation, does not seem superior but lets his employees assume responsibility and participate in decisions. As a result the climate is open, trustful and free of conflict. Thus Ekval and Arvnon (1991) seemed to have reproduced the traditional leadership dimension: employee-centred, or consideration or human relations leadership behaviour.

For the second factor the picture emerged of a manager who creates visions, accepts new ideas and is prepared to take risks and encourages co-operation (Ekvall, 1991). He is not rigid about sticking to plans but can accept changes. The climate is described as dynamic and energetic, humorous, full of ideas and debate, a climate in which commitment and motivation are strong. The work organisation is flexible and temporary rearrangements are made when necessary. Managers clearly exhibiting this leadership style are not necessarily consistent, prone to organise or to inspire a sense of security. Some of them are, others are not. In certain cases the climate is open and free of conflict, in others it was closed. The work organisation may allow for a clear indication of demands and responsibilities and provide clear information about results, but then again, it may differ (Ekvall, 1991). Thus Ekval and Arvnon (1991) called this factor the Change-oriented leader behaviour dimension.

The third factor accords exactly with the "initiating structure" of the Ohio State University research programme (Ekvall, 1991). This factor describes a manager who imposes order and method (i.e. structure), who is consistent and demands that action should stick to the plans. The work organisation provides for clear demands and responsibilities. Information is supplied about general decisions and about results. Thus Ekval and Arvnon (1991) called this factor the production-oriented leader behaviour dimension.

Ekvall (1991) did not provide any statistical information about the first obtained set of factors. However, in subsequent studies in Sweden (N = 346), Finland (N = 229) and the USA (N = 123), Ekvall and Arvonen (1991) reported the alpha coefficients (in brackets) of the three behaviour dimension structures: factor 1, change-centred, (0.94), factor 2, employee-centred, (0.93), factor 3, production-centred, (0.93). In this revised study Ekval and Arvonen (1991) constructed a questionnaire which contained 36 items, intended to tap the three domains of consideration, structure and change. Some items were taken from the scale they used in the earlier study (Ekval, 1991), others were developed with the three concepts in mind. The 36 items describe manager's leadership behaviour.

2.3.3. Proceeding research on Three-dimentional Leadership Behaviour

2.3.3.1. Factor Analyses

Ekvall and Arvonen (1994) provide research results on the three leadership styles studied in a range of countries, industry types and organisation levels. They found unequivocal evidence for a three-factor model of leadership behaviour, incorporating the well-known task-oriented and people-oriented factors, as well as the change-oriented factor.

Ekvall and Arvonen (1994) included 3,857 supervisors and managers in their study. They utilised staff training institutes in different countries to help them with collection of the data. Each participant had to rate his or her immediate supervisor or manager. The rated managers thus are the research subjects, each rated by one subordinate, the person taking part in the training program of the institute. The rated supervisors and managers came from 13 countries, from low, medium and high ranks, from different branches, from different functions and from private owned, public owned and corporate organisations. The biographic

variables shared acceptable age and educational ranges. Females were however highly under-represented, forming only about ten per cent of the respondents.

The Ekvall and Arvonen (1991) three-dimensional leadership behaviour questionnaire was Factor Analysed for this sample in order to confirm the factor structure from their earlier studies on 698 leaders in three countries. Three factors with eigen-values >1.0 emerged in this renewed and enlarged analysis. The three factors explain 97 percent of the total variance. The first factor was identified as the employee/relations factor, the second as the change/development factor and the third as the production/task/structure factor (Ekvall & Arvonen, 1994). The three factors, their selected items (with their factor loadings in brackets) are:

Employee/Relations factor: Cronbach Alpha = 0.75

- Shows regard for the subordinates as individuals (0.73)
- Is considerate (0.62).
- Allows his/her subordinates to decide (0.55).
- Relies on his/her subordinates (0.53).
- Is friendly, (0.52)

Change/Development factor: Cronbach Alpha = 0.85

- Offers ideas about new and different ways of doing things (0.71)
- Pushes for growth (0.69)
- Initiates new projects (0.67)
- Experiments with new ways of doing things (0.65)
- Gives thought and plans about the future (0.56)

Production/ Task/ Structure factor: Cronbach Alpha = 0.76

- Plans carefully (0.69)
- Is very exact about plans being followed (0.63)

- Gives clear instructions (0.61)
- Is controlling in his/her supervision of the work (0.57)
- Makes a point of following rules and principles (0.56)

In a subsequent study by Arvonen (1995) a questionnaire was distributed to 1,020 employees in two production plants in a Swedish forest company. The response rate was 77 percent. The instrument used was a slightly modified version of the CPE scale (Ekvall & Arvonen, 1991, 1994). Arvonen (1995) reports that the dimensions of structure and relations-orientation found here were almost identical with the CPE model. The dimension of change-orientation in this case had a propensity towards change, the future and visions. The scale had 40 questions, with Likert type responses between 0 - 4. Using Varimax rotation on the response data, three factors were found. The criterion for choosing the three factors was an eigenvalue > 1.0. The items with the highest loadings in each respective factor were selected and three constructs identified: employee-orientation, change-orientation and production-orientation. Cronbach's Alpha for each index was, respectively, 0.88, 0.91 and 0.85. The three sub-scales therefore had high internal consistency as well as retest reliability.

Applying Ekvall and Arvonen's (1991) scale, Skogstad and Einarsen (1999) present results from four organisations (N =1201): (1) A municipal institution providing social and health care services for the elderly in the community; (2) an editorial department of a private newspaper company; (3) a national engineering and servising workshop which maintains vehicles and equipment for the Norwegian navy; and (4) an off-shore industrial plant.

Skogstad and Einarsen (1999) applied Principal Component Factor Analysis and reliability tests (Cronbach's alpha) to scrutinise the leadership dimensions. Varimax rotation was employed in the Factor Analyses since this was the procedure used by Ekvall and Arvonen (1991) in the original study. Skogstad and Einarsen's (1999) selection criteria for items to be included in sub-scales reflecting leadership styles were coefficients exceeding 0.50 on the corresponding factor, and coefficients lower than 0.50 on the two remaining factors (Ekvall & Arvonen, 1991).

An Exploratory Factor Analysis of the scale including the total sample employing a Principal Components Analysis with Varimax rotation and eigenvalues > 1.0, yielded a three-factor solution which accounted for 63.4% of the total variance. The three rotated factors respectively accounted for 57.1, 3.5 and 2.8% of the total variance.

Skogstad and Einarsen (1999) conducted separate factor analyses (factors = 3, Principal Components Analysis) in each of the sub-samples. The three-factor solution accounted for 52% of the total variance in the responses of respondents of the off-shore industrial plant, compared to 59% in the health care services, and 50% in the editorial department and the naval workshop (Skogstad & Einarsen, 1999).

The separate Factor Analyses showed that the sub-sample from the offshore industrial plant yielded the highest number (7) items exceeding the 0.50 criterion on the factor representing change orientation, followed by the health care services sub-sample (6 items), the editorial department sub-sample (5 items), while in the naval workshop sub-sample only four items complied with the criterion.

Skogstad and Einarsen's (1999) adjusted measure for each dimension of the scale was based on the following item inclusion criteria: 5 items per sub-scale,

factor loadings > 0.50 in at least three or all sub-samples. To be accepted an item also had to correspond with one of the 5 items with the highest loadings in the studies by Ekvall and Arvonen (1991, 1994) and Arvonen (1995).

Based on their inclusion criteria the adjusted measure of change-centred leadership yielded high Cronbach alpha coefficients both in the total sample (0.88) and in the sub-samples (Skogstad & Einarsen, 1999). The sample of the offshore industrial plant yielded a Cronbach alpha coefficient of 0.85. In the other sub-samples' Cronbach alpha coefficients ranged from 0.81 to 0.88.

The adjusted measure of the employee-centred dimension yielded high reliability coefficients both in the total sample (0.88) and in the sub-samples (Cronbach's alpha coefficients ranged from 0.78 to 0.88).

The Skogstad and Einarsen (1999) adjusted measure of production-centred leadership also yielded high reliability coefficients both in the total sample (Cronbach's alpha = 0.87) and in the sub-samples (Cronbach's alpha coefficients ranging between 0.79 and 0.84).

Skogstad and Einarsen (1999) concluded that the Factor Analysis performed in their study yielded support for the existence of a change-centered leadership dimension by giving substantial support for a three-factor CPE model.

2.3.3.2. Leadership Behaviour Clusters

Ekvall and Arvonen (1994) postulated that it might be possible to incorporate various leadership theories, and many others, in their CPE model. Their postulate is influenced by the early works of Blake and Mouton (1964) and Hersey and Blanchard's (1969, 1982) contingency theory. They argue that it may be possible to incorporate many leadership theories in the CPE model through the formation of leadership behaviour clusters. Leadership behaviour clusters are

combinations or blends of the three CPE behaviour dimensions. Through the clustering of leadership behaviour the CPE model may introduce the integrative era of leadership theory Van Seters and Field (1989) hypothesised.

Ekvall and Arvonen (1994) state that one of the central controversies in leadership style theory concerns the generality of leadership behaviour effects versus situational contingency of leadership behaviour. The most salient advocates of the generality of leadership behaviour effects were Blake and Mouton (1964) with their Managerial Grid model. Their model is based on the 'classical' two behaviour dimensions, concern-for-production and concern-for-people - with nine points on each scale of the grid. Combinations of the nine points along each grid axis essentially represent leadership behaviour clusters. For example, a 1,1 combination is called the Laissez-faire leader (Blake & Mouton, 1964). Opponents to the generality view were especially Hersey and Blanchard (1969, 1982) who argued for the situational contingency of leadership behaviour.

Andersen (1993) points out that there are arguments for the situation as totally unimportant for the relationship between leadership behaviour style and effectiveness, and arguments to include the situation in order to comprehend the influence of leadership behaviour upon effectiveness. His conclusion is that one should consider the possibility of a reasonable compromise between these two opposing viewpoints: that the situation plays a minor but not unimportant role. Ekvall and Arvonen (1994) took Andersen's (1993) hypothesis into account in the analysis of their leadership behaviour Cluster Analyis.

Ekvall and Arvonen (1994) postulate that the personal behavioural style of a leader is a 'blend' of the three leadership behaviour dimensions. 'Blending' refers to integration as opposed to addition (Ekvall & Arvonen, 1994). As several authors (Blake & Mouton, 1982) have emphasised, the leadership style is more

like a 'chemical' compound of the different behaviour dimensions than a 'mathematical' summation (Ekvall & Arvonen, 1994). For that reason Blake and Mouton (1982) designate different styles, based on 'concern-for-production' and 'concern-for-people', as 5,4 or 1,3 and not as 5+4 or 1+3. Task-oriented, structuring leader behaviour, for example, has different qualities when in connection with strong employee and relations-centred behaviour than with low degrees of such behaviour. In a high-high style (designated as 9,9 on the grid) the employee-orientation represents structured behaviour with a democratic and considerate content (Blake & Mouton, 1982). In the high-low style the structured leader behaviour becomes autocratic and domineering.

The leader could thus be described with a behaviour style profile (or cluster of behaviours), marking his position on the three different leadership style dimensions (Ekvall & Arvonen, 1994). Each such behavioural style profile should be looked upon as a special 'blend', or integration, of the dimensions. The same position in one dimension would have different meanings and effects depending on the leaders' positions on the other two dimensions.

Ekvall and Arvonen (1994) acknowledge that the individual leader's behavioural style is unique, but when described in such broad dimensions as leadership style theory it is reasonable to assume that groups of leaders with similar profiles exist. They applied the Fastclus Cluster Analysis Technique (SAS Institute, 1989) to identify such leadership style profiles.

Ekvall and Arvonen (1994) decided on a ten-cluster structure, which depicted profiles that can be related to psychological as well as leadership theories.

The 10 profiles, corresponding to the clusters, are presented in Table 2.2. The signs (+ or -) are based on the mean values of each cluster in the leadership

indices and related to the means and standard deviations of the total group of 3,857 leaders in the following way:

++ More than 1 SD above the mean
+ Between 1/2 and 1 SD above the mean
+ - Up to 1/2 SD above or below the mean
- Between 1/2 and 1 SD below the mean
- - More than 1 SD below the mean

Table 2.2 Cluster profiles expressed as the cluster means' deviations from the total sample means

CLUSTER PROFILE	Profile Designation	N	Employee/ Relations	Change/ Development	Production/ Task/ Structure
1	Transactional Leader	250	--	+	+-
2	Idea Squirt	144	+	--	--
3	Invisible Leader	487	--	--	--
4	Domineering Entrepreneur	88	++	++	--
5	Middle-of-the road leader	840	+-	+-	+-
6	MBO leader	548	+-	+	+
7	Super leader	606	++	++	+
8	Gardener	280	++	-	++
9	Autocrat	161	--	+	--
10	Nice Guy	434	-	--	+

Note: From "Leadership profiles, situation and effectiveness," by G. Ekvall, and J. Arvonen, 1994, Creativity and Innovation Management, 3, (3), p. 151.

The following ten interpretations of the clusters as leadership behaviour profiles and their relevance to other leadership constructs were done by Ekvall and Arvonen (1994).

- **Profile 1** the **transactional leader** - depicts a leader who is task-oriented, structured and about average in employee-orientation. Such a leader is weak in change- and development-orientation. This seems to be similar to the type of leader Burns (1978) and Bass (1985) described as the **'transactional leader'**. Such a leader concentrates on running the business as it is, not changing it, and in so doing structures the tasks and roles, explaining to the subordinates what they have to do and what rewards they can expect when coming up to the requirements.

- **Profile 2 represents the idea-persons,** those leaders who have many ideas but who are unable to structure and actualise them and who do not listen to other peoples' ideas and views. Ekvall and Arvonen (1994) named them **idea squirts.**
- **Profile 3** is the picture of the vague and, in a figurative sense, invisible leader, named the **laissez-faire leader**. This is a non-leader in a leadership position.
- **Profile 4** portrays the style of the domineering, **entrepreneurial leader**, who is running change projects with vigour, fixed purposes and low consideration for subordinates and colleagues. This is a type of leader who activates change and development processes in companies, or starts new companies, but at the same time creates turbulence and conflicts. The domineering entrepreneur is a relatively rare figure, only 2 percent of the Ekvall and Arvonen (1994) sample belonged to this cluster.
- **Profile 5** depicts the **middle-of-the-road leader**, who practices all three behaviour types to some degree but has no conspicuous qualities, positive or negative, as a leader. This individual is seen as an average leader. The middle of the road leader is a leader without a distinctive profile and is average in all three leadership dimensions.
- **Profile 6** depicts the **'Management-by-Objectives' (MBO) leader**. Such leaders are structured and task-oriented. They motivate their subordinates by co-operating with them in the goal-setting processes. The goals are not only about the day to day operations but also refer to changes in operations. In that respect these leaders differ from the transactional leaders whose structured and motivation induced leadership behaviours are exclusively aimed at the present. It is a rational leadership style aspired to safe, smooth operations and small, stepwise predictable development. Goals are made clear and explained to subordinates concerning both the running of work and the conservative developments required.
- **Profile 7** represents the **super leaders, or the complete leaders**, who display all three behaviour styles to considerable degrees. The super leader is on the same high level concerning change/development and production/task/structure as the domineering entrepreneur of cluster 4 but there is a decisive difference in the employee/relations dimension, which gives an advanced quality to this profile. The super leader enacts the change and development-oriented role strongly while planning and structuring the processes through co-operative and

considerate means. The **'change masters'** described by Kanter (1983) might belong to this leadership style.

- **Profile 8.** The leader with this profile is named the **'Gardener' type.** This leader creates a climate where the subordinates' creativity can grow. It is a leadership geared to development, both of people and of products and processes. The lower level of structure is favourable to such strivings, but it does come into conflict with bureaucratic values and with short time-perspective, profit strategies. **'Transformational leaders'** (Burns, 1978; Bass, 1985) might also fit this profile. The gardener type of leader shares strong change/development orientation with both the domineering entrepreneur and the super leader. The gardener type of leader initiates and runs radical and risky change projects as the domineering entrepreneur does, but he does this by releasing the creativity of the subordinates much more than the latter does. The gardener's deviation from the super leader refers to the low level of structure-orientation. To have the subordinates working on creative change endeavours he must grant them freedom. The super leader on the other hand is much more structured and driving, which restricts his change strivings to more cautious projects.
- **Profile 9** is a portrait of the **autocratic leader** who is directing, controlling and conservative and who shows little consideration for subordinates.
- **Profile 10** shows the **'nice guy' type of leader**. It is a leader whose strong need of being popular makes him indulgent to such a degree that his potential to lead and to structure is diminished. Supervisors and managers with this profile are in reality non-leaders similar to the **'invisible leaders'** or **'laissez-faire'** type (profile 3)

Arvonen (1995) also did a cluster analysis on his sample (N =781) to identify different leadership styles. He applied the Fastclus procedure for disjoint clusters (SAS Institute, 1989). Clusters were chosen where the managers respectively have high and low values in all dimensions and clusters were also chosen where managers have high values in one dimension and low in others. Another criterion applied to ensure a meaningful cluster was that profiles should represent established concepts about leadership.

The resulting cluster structure was found to be in line with profiles that emerged in Ekvall and Arvonen's (1994) study. Arvonen (1995) argues that this indicates that there is stability in the cluster solution, by obtaining similar clusters from separate, independently gathered samples. Arvonen (1995) concurs that the strength of the cluster analysis is that it groups people in homogenous groups. Its weakness is however, that it is difficult to make an objective decision regarding the number of clusters and seperate cluster definitions relative from one body of material to another. On the other hand, the cluster technique provides the opportunity for better links with theory because the analyses are based on the individuals and not the variables (Arvonen, 1995).

Each observation was placed in a group of fairly similar combinations of leadership styles by means of Cluster Analysis. Arvonen (1995) produced seven clusters, selected by applying the criterion of obtaining a number of meaningful groups with connections to theoretical definitions of leadership. These different groups are set out in Table 2.3.

Table 2.3 **Clusters of leadership profiles, mean values (scale 0 - 4), number and percentage**

Cluster	Profile	Leadership style variable				
		Change Oriented	Relations Oriented	Structure Oriented		
		M	M	M	n	%
1	Humanist	1.40	3.12	1.82	73	9.8
2	Complete	2.84	3.26	3.00	345	46.0
3	Creative	3.37	1.56	1.55	21	2.8
4	Laissez-faire	1.64	1.9	1.60	158	21.0
5	Entrepreneur	3.15	1.98	2.73	30	4.0
6	Transformative	3.24	3.06	1.81	81	10.8
7	Bureaucrat	1.47	1.54	3.01	40	5.3
Total		2.44	2.35	2.22	748	100.0

Note: From "Leadership Behaviour and Coworker Health – A study in Process Industry," (p. 18) by J. Arvonen, 1995, Stockholm, Sweden: Department of Psychology, Stockholm University.

- Cluster 1 is a purely relations-oriented group, and describes a manager with **humanistic** features.
- Cluster 2 describes a leadership profile that consists of high values in all dimensions, a **complete manager.**
- Cluster 3 depicts a change-oriented manager, lacking other management features, called a **creative manager**.
- Cluster 4 contains relatively low values on all the behaviour variables and is designated the **laissez-faire** manager.
- Cluster 5 is change and structure oriented but does not focus on relations, called an **entrepreneur.**
- Cluster 6 describes a type of manager high in terms of change-orientation, relatively high in relations and lower in structure, representing the

transformational leader (Zaleznik, 1977; Burns, 1979; Bass, 1985; Tichy & DeVanna, 1986).

- In cluster 7 characterises the **bureaucrat** who controls through structure.

2.3.4. Shortcomings in current knowledge of the CPE construct

The Scandinavian researchers (Ekvall, 1991; Ekvall & Arvonen, 1991, 1994; Lindell & Rosenquist, 1992; Skogstad & Einarson, 1999) have established the available knowledge on the three-dimensional leadership behaviour construct. With the exception of one sample obtained from the USA (Ekvall, 1991) their work was conducted primarily on samples obtained in the Scandinavian countries. It is not known whether the CPE model can be replicated in another cultural setting such as South Africa. More specifically, it is important to establish whether the change-oriented dimension also exists in other cultural settings with perhaps different environmental influences than those prevailing in northern Europe. As far as could be established cross-validation of the CPE scale has not been done.

In addition, the relationships between the CPE dimensions and other variables have not been studied. Important constructs in organisational development such as emotional intelligence, organisational citizenship behaviour and visioning ability have not been related to leadership behaviour styles as far as could be established. Knowledge about relationships between the CPE leadership behaviour construct with e.g. emotional intelligence of leaders, as well as visioning ability and OCB of subordinates, could lead to some implications for management and enhance our understanding of these relationships.

2.4. Visioning Ability.

2.4.1. Introduction

Thoms and Greenberger (1995) argue that despite the existence of a body of literature that stresses the importance of time orientation in organisations, the relationship between leadership and time orientation remains largely unexplored.

An examination of the management literature reveals the importance of the past, the present, and the future in terms of the leader's time orientation. Thoms and Greenberger (1995) maintain that many of the leadership theories of the past 80 years follow in the path of Taylor's (1911) work that emphasise the measurement and consideration of the past in order to control the present. Subsequent leadership theories and models focus on such leadership roles and tasks requiring the ability to communicate, solve problems, disseminate information, direct the activities of others, and monitor individual and organisational performance (Mintzberg, 1973). Some of these models point to the importance of an ongoing review of the past to deal more effectively with the present. Others denote the importance of the leaders' role in day-to-day activities of the organisation. Thoms and Greenberger (1995) state that interest has focused on the need for leaders to "envision" the future. They emphasise that effective leaders must be able to focus on the past, the present, and the future.

2.4.2. The role of time and visioning ability in leadership theory.

Thoms and Greenberger (1995) suggest that time is treated explicitly in some leadership theories, such as a moderating factor. However, the majority of researchers view the role of time in leadership as an implicit factor. Further, in both explicit and implicit treatments, the orientation to time - past, present and future is different for different leadership theories. Thoms and Greenberger (1995)

indicate that all three phases in time should be accommodated in leadership theories. Table 2.4 illustrates Thoms and Greenberger's (1995) view of the relationship between major leadership theories and the time orientation of past, present, and future.

Table 2.4 Leadership theories and time outlook

Leadership Theory	Past	Present	Future
Sources of Power (French & Raven, 1959)	x	x	
Vertical Dyad Linkage Theory (Dansereau, Graen, & Haga, 1975)	x	x	
Managerial roles: figurehead, leader, liaison, monitor, disseminator, spokesman, disturbance handler, resource allocator, negotiator roles (Mintzberg, 1973)		x	
Managerial roles: Entrepreneur role (Mintzberg, 1973)			x
Ohio State Leadership Studies Consideration and Initiation of Structure (Stogdill, 1974)		x	
Michigan Leadership Studies Participative Leadership (Likert, 1967)		x	
Path-Goal Theory (House, 1971)		x	x
Situational Leadership Theory (Hersey & Blanchard, 1969)	x	x	
Leadership Substitutes Theory (Kerr & Jermier, 1978)		x	
Vroom-Yetton-Jago Model (Vroom & Jago, 1988)		x	
Integrating Taxonomy of Managerial Behaviours (Yukl, 1989)		x	
LPC Contingency Model (Fiedler, 1967)	x	x	
Attributional Theory (Calder, 1977)	x		
Charismatic Leadership Theory (House, 1977)	x	x	x
Transformational Leadership (Burns, 1978; Bass, 1985)	x	x	x

Note: From "The Relationship between Leadership and Time Orientation", by P. Thoms & D.B. Greenberger, 1995, Journal of Management Enquiry, 4, (3), p. 272.

A past-time disposition suggests that the leader's prior experiences and relationships with followers influence and shape the leader's current behaviour. A present-time disposition means that the leader reacts and responds to situations

as they currently occur. In this case expected outcomes are short term (i.e., relatively in the present) rather than long term. A future-time perspective reflects a leader's behaviour having a direct, purposeful bearing on the future.

There are a variety of present-oriented theories. All but one of the roles of managers (entrepreneur) described by Mintzberg (1973) relates to present responsibilities and monitoring of past performance. Implicit in these roles is the idea that successfully filling them will lead to a positive future. Both the Ohio State (Stogdill, 1974) and Michigan State University (Likert, 1967) leadership studies discuss the importance of present time orientation for effective leaders. Consideration, initiating structure, and use of participative styles in the present time orientation may result in positive outcomes, but the focus is relatively short term and primarily on present performances (Thoms & Greenberger, 1995).

Situational theories (Fiedler, 1967; Hersey & Blanchard, 1969; Vroom & Jago, 1988) are similar in focus; indicating that careful analyses of previous and present situations, can lead to appropriate leader behaviour. Leaders are encouraged to evaluate the past performance and behaviour of subordinates, as well as the current needs in order to establish future approaches.

Some of the leadership theories in Table 2.4 are more future-orientated. Path-goal theory is both present-oriented and future-oriented (Thoms & Greenberger, 1995). Charismatic (House, 1977) and transformational (Bass, 1985; Burns, 1978) leadership theories focus on the present as well as the future, suggesting the success of a future orientation. Thoms and Greenberger (1995) argue that because most people have difficulty to form a vision of the future, they expect leaders to help them if they want subordinates to direct their behaviour toward the future. Thoms (2000) argue that successful leaders have the innate ability not only to create a vision, but to inspire others to follow their vision.

Thoms and Greenberger (1995) are of the opinion that most leadership theories lack a future time orientation. Strategic planning would for instance require strong visioning abilities. This should be used in relation to a day-to-day present orientation and past orientations of performance reviews and problem solving. Different situations would call for different temporal skills. They suggest that contemporary complex and dynamic environments necessitate particular temporal skills, such as creating future schemes and predictions, involving a visioning ability which is well developed. Leaders capable of visioning and articulating schemata seem to be especially effective in organisations with rapidly changing environments.

2.4.3. Shortcomings in current knowledge on visioning ability

Thoms and Blasko's (1999) research has provided support for the validity of the visioning ability scale (refer to chapter 3), intended to assess an individual's ability to create a positive cognitive image of an organisation in the future.

An obvious shortcoming in current knowledge is that being such a new construct, relationships of visioning ability with other organisational behaviour constructs, such as leadership behaviour, have not been tested empirically. Referring to Table 2.4 – leadership theories and time outlook - this author argues that the CPE leadership behaviour model would most probably fit in all three temporal categories, of past, present and future, with a strong inclination towards a future time perspective.

2.5. Organisational Citizenship Behaviour

2.5.1. Introduction

There seems to be no consensus on a general definition of organisational citizenship behaviour (OCB). Turnipseed and Murkison (2000) indicate that

commonalties of OCB include behaviours which are extra-role, entirely voluntary, constructive, not formally assigned, non-compensated, but desired by the organisation. Van Dyne, Graham and Dienesch (1994) found many terms have been used to describe organisational citizenship behaviour, including prosocial organisational behaviour, extra-role behaviour (Van Dyne & Cummings, 1990), organisational spontaneity (George & Brief, 1992) and counter-role behaviour (Staw & Boettger, 1990). Bateman and Organ (1983) state that these behaviours contribute to effective functioning of the organisation.

Podsakoff, MacKenzie, Paine and Bachrach (2000) identified four major antecedents of OCB: individual (or employee) characteristics, task characteristics, organisational characteristics, and leadership behaviours. Podsakoff et al. (2000) found that the transformational leadership behaviours had significant and consistent positive relationships with OCB dimensions. The present study focuses on the three-dimensional CPE leadership behaviour construct as a possible antecedent of OCB among subordinates.

2.5.2. Types of Organisational Citizenship Behaviour

Podsakoff et al. (2000) found in their review of the OCB literature that there is a lack of consensus about the dimensionality of the construct. They identified almost 30 potentially different forms of OCB, indicating construct redundancy. The different forms of OCB are classified into seven common themes or dimensions: (1) Helping behaviour, (2) Sportsmanship, (3) Organisational loyalty, (4) Organisational compliance, (5) Individual initiative, (6) Civic virtue, and (7) Self-development (Podsakoff et al., 2000).

- Conceptually, ***helping behaviour*** involves voluntarily helping others with, or preventing the occurrence of, work related problems. The first part of this

definition (helping others with work-related problems) includes altruism, peacemaking and cheerleading dimensions (Organ, 1988, 1990); interpersonal helping (Graham, 1989); interpersonal facilitation (Van Scotter & Motowidlo, 1996); and the helping others elements, identified by George and Brief (1992) and by George and Jones (1997). The second part of the definition captures Organ's (1988, 1990) notion of courtesy, which involves helping others by taking steps to prevent the creation of problems for co-workers.

- Organ (1990, p.96) defines ***Sportsmanship*** as a willingness to tolerate the inevitable inconveniences and impositions of work without complaining. Podsakoff et al. (2000) see sportsmanship as behaviour where people do not complain when they are inconvenienced by others, and maintain a positive attitude even when things do not go their way. They are not offended when others do not follow their suggestions, are willing to sacrifice their personal interest for the good of the work group, and do not take the rejection of their ideas personally.
- ***Organisational loyalty*** consists of loyalty boosting behaviours (Graham, 1989, 1991), spreading goodwill and protecting the organisation (George & Brief, 1992; George & Jones, 1997) endorsing, supporting and defending organisational objectives (Borman & Motowidlo, 1993, 1997). Podsakoff et al. (2000) claim that organisational loyalty entails promoting the organisation to outsiders, protecting and defending it against external threats, and remaining committed to it, even under adverse conditions.
- ***Organisational compliance*** has been called generalised compliance (Smith, Organ & Near, 1983); organisational obedience (Graham, 1991); following organisational rules and procedures (Borman & Motowidlo, 1993); and

containing aspects of the job dedication concept (Van Scotter & Motowidlo, 1996). This dimension indicates a person's internalisation and acceptance of the organisation's rules, regulations and procedures, resulting in a scrupulous adherence, even when not observed or monitored for compliance (Podsakoff et al., 2000).

- ***Individual initiative*** refers to engaging in task-related behaviours at a level that is far beyond minimally required or generally expected levels with a voluntary flavour (Podsakoff et al., 2000). Such behaviours include voluntary acts of creativity and innovation to improve one's task or the organisation's performance. It further includes persistence with extra enthusiasm and effort to accomplish one's job, volunteering to take on extra responsibilities, and encouraging others in the organisation to do the same. All of these behaviours have in common that the employee is acting "above and beyond" the call of duty. This dimension is similar to conscientiousness (Organ, 1988); personal industry and individual initiative (Graham, 1989; Moorman & Blakely, 1995); making constructive suggestions (George & Brief, 1992; George & Jones, 1997); persisting with enthusiasm and volunteering to carry out task activities (Borman & Motowidlo, 1993, 1997); taking charge at work (Morrison & Phelps, 1999) as well as some aspects of the job dedication concept (Van Scotter & Motowidlo, 1996).
- ***Civic virtue*** represents a macro-level interest in, or commitment to, the organisation as a whole. This is shown by a willingness to participate actively in organisation governance (e.g., attend meetings, engage in policy debates, express one's opinion about what strategy the organisation ought to follow, etc.). Civic virtue also encompass monitoring the environment for threats and opportunities and to look out for the organisation's best interests, even at

great personal cost (Podsakoff et al., 2000). These behaviours reflect a person's recognition of being part of a larger whole in the same way that citizens are members of a country and accept the responsibilities which it entails. This dimension has also been referred to as organisational participation (Graham, 1989) and protecting the organisation (George & Brief, 1992).

- The dimension of ***Self-development*** includes voluntary behaviour of employees to improve knowledge, skills, and abilities. According to George and Brief (1992, p.155) this might include seeking out and taking advantage of advanced training courses, keeping abreast of the latest developments in one's field and area, or even learning a new set of skills so as to expand the range of one's contributions to an organisation.

2.5.3. Antecedents of Organisational Citizenship Behaviour

According to Podsakoff et al. (2000) empirical research has focused on four major antecedents: individual (or employee) characteristics, task characteristics, organisational characteristics and leadership behaviours. Podsakoff et al. (2000) reports the meta-analytic results on relationships between OCBs and their antecedents. The mean correlations were corrected for sampling error and measurement reliability, along with the number of studies and the total sample size on which each study was based. The number of studies on which Podsakoff et al. (2000) based the correlations ranged from 2 to 28 and the sample size ranged from 502 to 6,746, with an average size of 2,040.

The leadership behaviour antecedents investigated were divided into different categories by Podsakoff et al. (2000) (refer to Table 2.5):

- Transformational leadership behaviours (articulating a vision, providing an appropriate model, fostering the acceptance of group goals, high performance expectations and intellectual stimulation);
- Transactional leadership behaviours (contingent reward behaviour, contingent punishment behaviour, non-contingent reward behaviour, non-contingent punishment behaviour);
- Behaviours identified with either the Path-Goal theory of leadership (role clarification behaviour, specification of procedures, or supportive leader behaviour) and
- The Leader-Member Exchange (LMX) theory of leadership.

Table 2.5 Meta-Analytic Correlations between Leader Behaviours and Organisational Citizenship Behaviours

	Altruism	Courtesy	Conscientious	Sportsman	Civic Virtue	Generalised Compliance
Leadership Behaviours						
Articulating a Vision	.20 (4/3053)	.20 (2/1588)	.19 (2/1588)	.23 (2/1588)	.13 (2/1588)	
Providing an Appropriate Model	.24 (2/1588)	.25 (2/1588)	.21 (2/1588)	.21 (2/1588)	.15 (2/1588)	
Fostering the Acceptance of Group Goals	.23 (2/1588)	.21 (2/1588)	.18 (2/1588)	.21 (2/1588)	.12 (2/1588)	
High Performance Expectations	.14 (4/3053)	.17 (3/2576)	.15 (3/2576)	.13 (4/ 3053)	.09 (4/3053)	
Intellectual Stimulation	.20 (4/3053)	.18 (3/2576)	.18 (3/2576)	.17 (4/3053)	.11 (4/3053)	
Contingent Reward Behaviour	.26 (7/2351)	.26 (5/1544)	.26 (6/2156)	.25 (5/1544)	.15 (5/1544)	
Contingent Punishment Behaviour	-.04 (7/2351)	.01 (5/1544)	-.03 (6/2156)	-.02 (5/1544)	.01 (5/1544)	
Non-Contingent Reward Behaviour	.13 (7/2351)	.08 (5/1544)	.12 (6/2156)	.09 (5/1544)	.07 (5/1544)	
Non-Contingent Punishment Behaviour	-.25 (7/2351)	-.19 (5/1544)	-.26 (6/2156)	-.24 (5/1544)	-.08 (5/1544)	
Leader Role Clarification	.12 (7/2456)	.18 (5/1544)	.12 (7/2456)	.19 (5/1544)	.04 (5.1544)	
Leader Specification of Procedures	-.09 (7/2456)	-.04 (5/1544)	-.07 (7/2456)	-.09 (5/1544)	-0.7 (5/1544)	
Supportive Leader Behaviours	.26 (12/5704)	.28 (8/4120)	.25 (10/5032)	.25 (9/4597)	.15 (9/4597)	.35 (8/3062)
Leader-Member Exchange.	.36 (4502)					

Note. This table shows the mean correlations corrected for sampling error and measurement reliability, along with the number of studies and the total sample size (in brackets (number of studies/sample size)) on which each correlation is based. Adapted from "Organisational Citizenship Behaviours: A Critical review of the Theoretical and Empirical Literature and Suggestions for Future Research." By P.M. Podsakoff, S.C. MacKenzie, J.B. Paine and D.G. Bachrach, 2000, Journal of Management, 26, 3, p.528.

Podsakoff et al. (2000) found very strong relationships between leaders' behaviour and OCB's in their meta-analysis findings. Table 2.5 gives a summary of their meta-analysis. With a few exceptions, almost all of the leader behaviour-OCB relationships were found to be significant. Leader's supportive behaviour was strongly related to organisational citizenship behaviour. Transformational leadership behaviour also had significant relationships with identified OCB factors.

2.5.4. Effects of Organisational Citizenship Behaviour

A main principle of Organ's (1988) definition of OCB is that, when taken over time, such behaviour enhances organisational effectiveness. For many years, this assumption went untested and its acceptance was based more on its conceptual plausibility than direct empirical evidence (Podsakoff & MacKenzie, 1994). Conceptually, there are several reasons why citizenship behaviours might influence organisational effectiveness. OCBs may contribute to organisational success by (Podsakoff et al., 2000):

- enhancing co-worker and managerial productivity;
- freeing up resources so they can be used for more productive purposes;
- reducing the need to devote scarce resources to purely maintenance functions;
- helping to co-ordinate activities both within and across work groups;
- strengthening the organisation's ability to attract and retain the best employees;
- increasing the stability of the organisation's performance and;
- enabling the organisation to adapt more effectively to environmental changes.

However, despite the intuitive plausibility of the assumption that OCBs contribute to the effectiveness of work teams and organisations, Podsakoff et al.

(2000) found this issue has received little empirical attention. They report that only five studies have attempted to test whether these behaviours influence organisational effectiveness, while over 160 studies have been reported in the literature to identify the antecedents of OCBs.

Podsakoff et al. (2000) found that the overall pattern of studies reported in their review, provide general support for the hypothesis that organisational citizenship behaviours are related to organisational effectiveness. By means of multiple regression OCBs accounted for 19% of the variance in performance quantity; 18% in performance quality; 25% in financial efficiency indicators (operating efficiency, and revenue); and 38% in customer service indicators (customer satisfaction and customer complaints). Podsakoff et al. (2000) conclude that the meta-analyses supports Organ's (1988) assumption that OCB is related to performance, although the evidence is stronger for some forms of OCB (i.e. helping) than for others (i.e. sportsmanship and civic virtue).

2.5.5. Shortcomings in current knowledge on OCB

In a review of empirical research it is indicated that for leadership behaviour, only relationships of the latest leadership theories (such as transformational, transactional and leader-member exchange theory) with OCB have been investigated (Podsakoff et al., 2000). This is perhaps no surprise since the OCB construct is only two decades in our midst.

A shortcoming in our knowledge is therefore that relationships between OCB and the CPE leadership behaviour construct, have not been investigated and needs empirical testing.

Secondly, as far as could be established, the relationships between subordinate OCB and subordinate visioning ability have not been researched because the latter construct has only recently been established.

Finally, relationships between OCB of subordinates and emotional intelligence of leaders could not be found in the literature. Abraham (1999) posits that EI should be directly related to OCB, arguing EI may enhance certain pro-social behaviours.

2.6. Emotional Intelligence

2.6.1. Introduction

The construct of emotional intelligence and its applications are gaining in popularity. Schutte and Malouff (1999) state that this is illustrated by the publication of over 30 books on EI between 1994 and 1999.

Though Gardner (1993) did not use the term "emotional intelligence," his concepts of intra-personal and interpersonal intelligence provided a foundation for later models and popularisation of the term emotional intelligence. The core of intra-personal intelligence is the ability to know one's own emotions, while the core of interpersonal intelligence is the ability to understand other individuals' motivations, emotions and intentions. According to Gardner (1993) an individual with a high level of intra-personal intelligence is able to detect and express his own complex and differential sets of feelings. An individual with a high level of interpersonal intelligence is able to determine even subtle intentions and desires of other individuals. Recognising emotions in others enables an individual to interact effectively with other people (Schutte & Malouff, 1999).

Salovey and Mayer (1990), who first used the term "emotional intelligence," postulated that EI consists of three categories of adaptive abilities: appraisal

and/or expression of emotion, regulation of emotion utilisation of emotions in solving problems and decision making.

George (2000) proposes how EI contributes to effective leadership by suggesting five essential elements of leader effectiveness.

The present study is focused on investigating the EI of leaders and the relationships between leadership behaviour dimensions and the dimensions of the EI construct. A further potential contribution will be the determination of EI 'profiles' for different leadership styles as defined by different CPE dimension combinations.

2.6.2. Conceptualisation of the current situation

2.6.2.1. The EI construct

According to the model of Salovey and Mayer (1990), emotional intelligence involves five primary dimensions:

(a) Accurately recognising and expressing one's own emotions (or self–awareness);

(b) regulating one's emotions (self-regulation);

(c) using emotions to make good decisions and to motivate oneself (self-motivation);

(d) understanding others' emotions (empathy) and;

(e) Being able to influence others' emotions for their benefit and one's own benefit (social skills).

These notions are described by Salovey and Meyer (1990) as follows:

Self-awareness means having a deep understanding of one's emotions, strengths, weaknesses, needs, and drives. People with strong self-awareness are neither overly critical nor unrealistically hopeful. They are honest - with themselves

and with others. People who have a high degree of self-awareness recognise how their feelings affect themselves, other people, and their job performance. Self-awareness extends to a person's understanding of his or her values and goals. Self-aware people are cognisant and comfortable talking about their limitations and strengths. They often demonstrate an openness for constructive criticism. In contrast, people with low self-awareness interpret the message that they need to improve as a threat or a sign of failure. Self-aware people can also be recognised by their self-confidence.

Self-Regulation which is similar to an ongoing inner conversation, is the component of emotional intelligence that frees one from being a prisoner of your own feelings. People engaged in such inner conversation are as much exposed to bad moods and emotional impulses as others are, but they find ways to control and channel it in useful ways. It also involves the propensity to suspend judgement, to think before acting. Self-regulation is an inclination to reflection and thoughtfulness, a comfort with ambiguity and change. It involves an ability to suppress impulsive urges.

Self-motivation is a passion to work for reasons that go beyond money or status. It is the propensity to pursue goals with energy and persistence. People with high self-motivation seek out creative challenges, enjoy learning and take pride in a job well done. They display an unflagging energy to do things better. They often seem restless with the status quo. They are persistent in questioning set procedures. They are eager to explore new approaches to their work. People with high self-motivation remain optimistic even in times of adversity.

Empathy is an ability to understand the emotional makeup of other people and a skill of treating people according to their emotional reactions. Empathy means thoughtfully considering employees' feelings taking into account other

factors in the process of making informative decisions. Empathy is particularly important as a component of leadership for at least three reasons: the increasing use of teams; the rapid pace of change and globalisation; and the growing need to retain talented people. People who have empathy are attuned to subtleties in body language; they can hear the message beneath the words being spoken. They also have a deep understanding of the existence and importance of cultural and ethnic differences.

Social Skills are the culmination of the different dimensions of EI. The first three components of emotional intelligence are all self-management skills. The last two, empathy and social skills, refer to a person's ability to manage relationships with others. People tend to be very effective at managing relationships when they can understand and control their own emotions and can empathise with the feelings of others.

Social skills lead to a proficiency in managing relationships, building networks, finding common ground and building rapport. Social skills are not only a matter of friendliness. It is friendliness with a purpose - moving people in the desired direction, whether it is agreement on a new strategy or enthusiasm about a new vision. Socially skilled people tend to have a wide circle of acquaintances, and a flair for finding common ground with people of all kinds - an ability to build rapport. They do not necessarily socialise continually. They work according to the assumption that important things do not get done on an individual level.

2.6.2.2. The status of research on EI and leadership

Downing (1997) points out that the growth in interest in EI is associated with increasing organisational contextual volatility and change, and points out that organisational change is frequently associated with emotional or interpretative

conflict. To deal with rapid technological and social change, individuals need the interpersonal competencies embodied in the EI construct (Schmidt, 1997).

Dulewicz and Higgs (2000) found that the concept of EI is based on extensive scientific and research evidence, by for example Salovey and Meyer (1990), Cooper (1997) and Cooper and Sawaf (1997). However, they conclude that little research has been conducted in an organisational context and existing research has been largely deducted from psychological, educational and therapy research fields. Dulewicz and Higgs (2000) conclude that organisational applications of EI tend to be based on derivative arguments, largely anecdotal case descriptions and in some cases pure rhetoric. For example much of Goleman's (1996) work on EI provides examples from research in the educational sphere. Research that rigorously demonstrates the impact of EI on success and performance in an organisational context remains uncommon. The proposition underlying much of the focus of EI in relation to its organisational application, appears to be derived from a desire to explain differential achievement of success in an organisational context which cannot adequately be accounted for by traditional measures such as IQ tests (Dulewicz & Higgs, 2000).

Tucker, Sojka, Barone and McCarthy (2000) concur that current changes in the work environment suggest that EI might be of increasing importance to managers in the new millennium.

George (2000) states that while existing studies discuss what leaders are like, what they do, and how they make decisions, the role of emotions in the leadership process, are often not explicitly considered in the leadership literature. The notable exception is the work on charisma (e.g. Conger & Kanungo, 1998; Lindholm, 1990). George (2000) finds this relative neglect not surprising as the organisational literature has been dominated by a cognitive orientation, with

emotions being ignored or being seen as something that gets in the way of rationality and effective decision making. George (2000) argues that just as motivation theory and research have ignored how workers' emotions influence their choice of work activities, levels of effort, and levels of persistence in the face of obstacles, leadership theory and research have not adequately considered how leaders' emotions influence their effectiveness as leaders.

Palmer, Walls, Burgess and Stough (2001) state that the extent to which EI accounts for effective leadership is currently unknown. They found that despite much interest in relating EI to effective leadership there is little research published that has explicitly examined this relationship.

2.6.3. Shortcomings in current knowledge on EI

The discussion on the status of research on EI and leadership in 2.6.2.2 indicates the almost complete lack of knowledge on relationships between leadership behaviour and EI. There is thus a definite need for rigorous research to underpin relationships between leadership behaviour and EI.

Assertions are made about the growth in interest in EI in organisations due to heightened organisational contextual volatility and change (Downing, 1997; Tucker, et al. 2000). The change-centred leadership behaviour dimension in the CPE model, related to EI dimensions of leaders may address some of the shortcomings in our understanding of the relationships between leader behaviour and leader EI.

2.7. Research Questions

The objectives of this study as discussed in 1.3 are schematically summarised in Figure 2.1. The solid lines show the main relationships that will be investigated. In addition, as a secondary set of objectives the existence of

relationships shown by the dashed lines will also be investigated. Namely, to determine if there are relationships between the visioning ability of subordinates and the EI of leaders, and the visioning ability of subordinates and the OCB of subordinates.

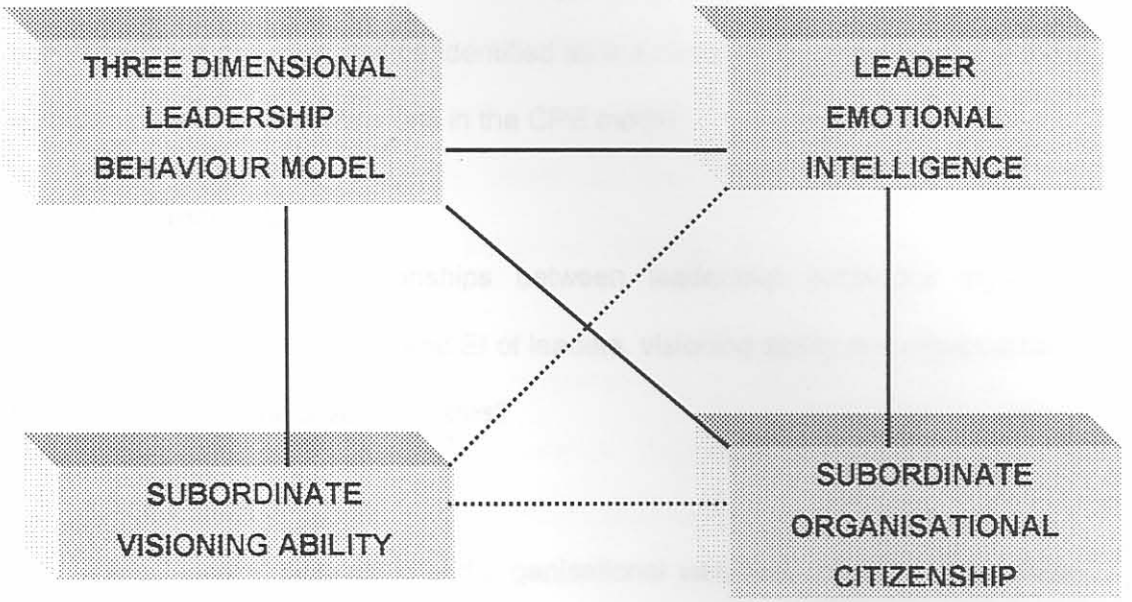

Figure 2.1 Model of relationships between constructs studied.

From the objectives of this study and identified shortcomings in current knowledge on the four constructs as shown in Figure 2.1, three research questions and propositions for this study are investigated.

2.7.1. Question 1

Does leadership behaviour exist in a three dimensional form as identified by the CPE model in a sample of South African managers? That is, is the CPE construct identifiable in another cultural and environmental setting, such as South Africa, with the same leadership behaviour dimensions?

2.7.1.1. Proposition 1.1:

The CPE scale of Ekvall (1991) is transportable to a South African cultural setting and demonstrates significant construct validity.

2.7.1.2. Proposition 1.2:

Different leadership behaviour style groupings (clusters) exists – each behaviour style grouping can be identified as a distinctive combination of the three leadership behaviour dimensions in the CPE model.

2.7.2. Question 2

What are the relationships between leadership behaviour styles as identified with the CPE model and EI of leaders, visioning ability and organisational citizenship behaviour of subordinates?

2.7.3. Question 3

Are leaders' biographic and organisational variables related to their three-dimensional leadership behaviour styles?

2.8. Conclusions

Being a new construct the CPE model has not been tested empirically in many environments, cultures, or related to many behavioural constructs. Of particular interest in this study are relationships between the CPE dimensions and leaders' emotional intelligence, subordinates' OCB and visioning ability.

The application of the CPE model through the identification of various leadership style profiles (clusters) seems to integrate a variety of former leadership theories (such as the situational, transactional, and transformational theories). The three-dimensional CPE leadership behaviour construct revisits the traditional two-dimensional construct, which was well developed and researched in the 1950s to

1970s. It will enrich our understanding of the kinds of leadership behaviour that is necessary in contemporary organisations and in organisations of the near future.

Thoms and Greenberger (1995) argue that despite the existence of a body of literature that stresses the importance of time orientation in organisations, the relationship between leadership behaviour and time orientation remains largely unexplored. The development of the visioning ability scale is their first attempt to address this shortcoming in leadership theory. Investigating relationships between the CPE model with visioning ability of subordinates would add to our understanding of how leadership behaviour potentially influences the formation of vivid mental images about the future.

The construct of emotional intelligence and its applications are gaining in popularity in organisation behaviour literature. However, little research has been conducted in organisational contexts and existing research has been largely drawn from psychological, educational and therapy research fields. Organisational applications of EI tend to be based on derivative arguments and largely anecdotal case descriptions and in some cases pure rhetoric. The growth in interest in EI is associated with increasing organisational contextual volatility and change, and because organisational change is frequently associated with emotional conflict.

The extent to which EI accounts for effective leadership is currently unknown. Despite much interest in relating EI to effective leadership there is little research published that has explicitly examined this relationship. This study proposes to investigate linkages between EI, leadership behaviour as conceptualized through the CPE model, subordinate OCB and visioning ability.

From empirical research evidence it has been established that leadership behaviours have direct relationships with OCB, some positive and others negative.

Research is necessary on the CPE leadership behaviour construct to establish its relationships with the OCB dimensions for subordinates.

3. CHAPTER 3 METHODOLOGY

3.1. Introduction

This study is part of a joint research programme embarked upon by the University of Pretoria and funded by the National Research Foundation. The aim of this study is to investigate leadership behaviour styles in South African organisations. This is an investigation into contemporary turbulent organisational environments where change is at the order of the day. The relationships between the four constructs chosen for this study have as far as could be established never been studied in South Africa and represent, in most cases, novel concepts. Participants completed questionnaires on their leaders' behaviours on two scales, the leadership behaviour CPE scale and an EI scale for their leaders. Participants completed two questionnaires on their own behaviour, that is, Visioning Ability and Organisational Citizenship Behaviour (OCB).

3.2. Research Design

The research design is the structure in terms of which the study is carried out. The current study firstly explores the existence of the CPE leadership behaviour construct in a South African context. Relationships with other constructs related to leadership behaviour are also investigated, such as leader EI, subordinate visioning ability and subordinate OCB.

In accordance with the objectives of the study, a sample of leaders and individuals in managerial or supervisory roles, were drawn from a large organisation, operating in a variety of diverse industry sectors. This organisation is represented in a variety of industrial sectors within the South African economy. It

is divided into separate companies that are active in mining, engineering, research and development, fuel and energy production and marketing, chemical manufacturing and marketing, oil and gas exploration and other industrial sectors. The participants were drawn from subordinates of the leaders in the top 4 leadership layers of the organisation hierarchy. The sample contained both genders and members of all ethnic and race groups. A survey research design was used.

Demographic variables on which information was obtained for both the participants (the subordinates completing the questionnaire) as well as for the participant's superior who is being assessed by the sub-ordinate, were as follows:

- Age
- Gender
- Race
- Hierarchical level in the organisation
- Level of qualifications
- Number of people directly reporting to him/her
- Number of people he/ she is responsible for
- Functional area within which he/she works

3.3. Participants

The biographical characteristics of the sample of participants are presented in order to get a clear portrayal of the survey group. Demographic information of the assessed leader and the self-assessed subordinate is given in tabular form.

The age distribution of the respondents' leaders is shown in Table 3.1.

Table 3.1 Age distribution of leaders

Age	Frequency	Percentage of total Sample	Cumulative Frequency	Cumulative Percent
27	1	0.11	1	0.11
28	4	0.46	5	0.57
30	11	1.25	16	1.82
31	6	0.68	22	2.50
32	8	0.91	30	3.41
33	7	0.80	37	4.21
34	4	0.46	41	4.66
35	31	3.53	72	8.19
36	24	2.73	96	10.92
37	16	1.82	112	12.74
38	42	4.78	154	17.52
39	15	1.71	169	19.23
40	72	8.19	241	27.42
41	27	3.07	268	30.49
42	25	2.84	293	33.33
43	35	3.98	328	37.32
44	30	3.41	358	40.73
45	73	8.30	431	49.03
46	34	3.87	465	52.90
47	21	2.39	486	55.29
48	43	4.89	529	60.18
49	22	2.50	551	62.68
50	77	8.76	628	71.44
51	16	1.82	644	73.27
52	37	4.21	681	77.47
53	41	4.66	722	82.14
54	28	3.19	750	85.32
55	39	4.44	789	89.76

56	17	1.93	806	91.70
57	17	1.93	823	93.63
58	12	1.37	835	94.99
59	5	0.57	840	95.56
60	11	1.25	851	96.81
61	2	0.23	853	97.04
62	1	0.11	854	97.16
63	1	0.11	855	97.27
69	1	0.11	856	97.38
Unknown	23	2.62	879	100.00
TOTAL	879	100.00		

The leaders' age varies between a minimum of 27 and a maximum of 69 years. The mean age is 45.7 years with a standard deviation of 7.2 years.

The gender distribution of the leaders is shown in Table 3.2.

Table 3.2 Leaders' gender

Gender	Frequency	Percentage	Cumulative Frequency	Cumulative Percent
Male	848	96.47	848	96.47
Female	31	3.53	879	100.00

The majority of the leaders are male (n= 848) representing 96.47 % of the sample.

The leaders' race distribution is shown in Table 3.3.

Table 3.3 Leaders' Race

Race	Frequency	Percentage	Cumulative Frequency	Cumulative Percent
Black	26	2.96	26	2.96
White	831	94.54	857	97.50
Asian	15	1.71	872	99.20
Coloured	2	0.23	874	99.43
Other	4	0.46	878	99.89
Unknown	1	0.11	879	100.00
Total	879	100.00		

The majority (n = 831) of the leaders are from the white group, representing 94.95% of the total sample. The second largest group are the black group (n = 26) representing only 2.96 % of the total sample.

The hierarchical level on which the leaders function is shown in Table 3.4.

Table 3.4 Leaders' hierarchical level

Level in Organisation	Frequency	Percentage	Cumulative Frequency	Cumulative Percent
Level 1	28	3.19	28	3.19
Level 2	148	16.84	176	20.02
Level 3	264	30.03	440	50.06
Level 4	384	43.69	824	93.74
Level 5	54	6.14	878	99.89
Unknown	1	0.11	879	100.00
Total	879	100.00		

The organisational hierarchical levels vary from level 1, which is the highest in the organisation to level 13, which is the lowest. The top five levels are

considered to represent all leadership positions within this organisation. The largest single group of the leaders in this sample are on Level 4 (n = 384) and Level 3 (n = 264), representing 43.69% and 30.03% of the sample respectively. The top two hierarchical levels represent 20.02% of the total sample.

The leader's level of qualifications is shown in Table 3.5.

Table 3.5 Leaders' level of qualifications

Highest Qualification	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Secondary school	3	0.34	3	0.34
Std 10 or equivalent	9	1.02	12	1.37
Post-school certificate / diploma	106	12.06	118	13.42
Bachelor's degree or equivalent	294	33.45	412	46.87
Honours degree or equivalent	156	17.75	568	64.62
Masters degree or equivalent	227	25.82	795	90.44
Doctoral degree or equivalent	73	8.30	868	98.75
Unknown	11	1.25	879	100.00
Total	879	100.00		

From Table 3.5, it is evident that this sample of leaders is a highly educated group. More than 98% have post-school qualifications. The largest single group of the leaders (n = 294) have a Bachelor's degree or equivalent qualification, followed by leaders with a masters degree or equivalent (n = 227). These two categories represent 33.45% and 25.82% respectively of the total sample.

The number of people who are reporting to the respondents' leaders are shown in Table 3.6.

Table 3.6 Number of subordinates reporting directly to the leader

Number of subordinates	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 – 5	259	29.47	259	29.47
6 – 10	415	47.21	674	76.68
11 – 15	102	11.60	776	88.28
16 – 20	51	5.80	827	94.08
21 – 30	21	2.39	848	96.47
31 – 50	13	1.48	861	97.95
51 – 100	11	1.25	872	99.20
Unknown	7	0.80	879	100.00
Total	879	100.00		

The number of subordinates directly reporting to the leaders, ranged between 1 and 99, with a mean number of 9.8 and a standard deviation of 10.1. The largest single group of leaders (n = 415) have between 6 and 10 individuals reporting to him/her. The second largest group of leaders have 1 to 5 direct subordinates (n = 259). These two leader groupings represent 47.50% and 29.60% respectively of the sample.

In addition to direct reports the leaders may also be indirectly responsible for other people such as the subordinates' underlings farther down the hierarchy of the organisation or department he or she is leading. The number of people the leader is responsible for in a direct or indirect way is shown in Table 3.7.

Table 3.7 Number of people the leader is responsible for

Number people responsible for	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 – 5	70	7.96	70	7.96
6 – 10	108	12.29	178	20.25
11 – 20	124	14.11	302	34.36
21 – 30	70	7.96	372	42.32
31 – 50	76	8.65	448	50.97
51 – 80	77	8.76	525	59.73
81 – 110	43	4.89	568	64.62
111 – 160	62	7.05	630	71.67
161 – 210	47	5.35	677	77.02
211 – 300	47	5.35	724	82.37
301 – 400	33	3.75	757	86.12
401 – 600	37	4.21	794	90.33
601 – 1000	36	4.10	830	94.43
1001 – 2000	21	2.39	851	96.81
2001 – 5000	8	0.91	859	97.72
5001 – 10000	14	1.59	873	99.32
Unknown	6	0.68	879	100.00
Total	879	100.00		

The number of people leaders are directly and indirectly responsible for, ranged from 1 to 10 000, with a mean number of 314,2 and a standard deviation of 1016. The highest frequency (n = 124) was reported for leaders responsible for the number of people ranging between 11 and 20, with a corresponding percentage of 14.11%.

The functional area within which the leader is active is shown in Table 3.8.

Table 3.8 Leaders' functional area

Functional area	Frequency	Percentage	Cumulative Frequency	Cumulative Percent
General Management	224	25.48	224	25.48
Human Resources	28	3.19	252	28.67
Production	88	10.01	340	38.68
Financial and Commercial	103	11.72	443	50.40
Marketing	63	7.17	506	57.57
Corporate Services	26	2.96	532	60.52
Engineering, Design or Project Management	170	19.34	702	79.86
Information Technology	27	3.07	729	82.94
Maintenance Services	55	6.26	784	89.19
Research and Development	57	6.48	841	95.68
Other	38	4.32	879	100.00
Total	879	100.00		

The two largest single groups of leaders are in General Management (n = 224) and in Engineering, Design or Project Management (n = 170) positions. Individuals in these functions make up 25.48% and 19.34% respectively of the total sample.

The following tables show the demographic characteristics of the respondents themselves (subordinates to the leaders being assessed). Table 3.9 shows the age distribution of the respondents.

Table 3.9 Age distribution of respondents

Age	Frequency	Percentage of total Sample	Cumulative Frequency	Cumulative Percent
26	2	0.23	2	0.23
27	8	0.91	10	1.14
28	13	1.48	23	2.62
29	26	2.96	49	5.57
30	37	4.21	86	9.78
31	34	3.87	120	13.65
32	35	3.98	155	17.63
33	22	2.50	177	20.14
34	28	3.19	205	23.32
35	25	2.84	230	26.17
36	26	2.96	256	29.12
37	26	2.96	282	32.08
38	33	3.75	315	35.84
39	23	2.62	338	38.45
40	35	3.98	373	42.43
41	20	2.28	393	44.71
42	36	4.10	429	48.81
43	35	3.98	464	52.79
44	33	3.75	497	56.54
45	56	6.37	553	62.91
46	39	4.44	592	67.35
47	28	3.19	620	70.53
48	33	3.75	653	74.29
49	29	3.30	682	77.59
50	32	3.64	714	81.23
51	17	1.93	731	83.16
52	29	3.30	760	86.46
53	16	1.82	776	88.28

54	21	2.39	797	90.67
55	17	1.93	814	92.61
56	18	2.05	832	94.65
57	14	1.59	846	96.25
58	8	0.91	854	97.16
59	4	0.46	858	97.61
60	4	0.46	862	98.07
61	4	0.46	866	98.52
62	5	0.57	871	99.09
64	1	0.11	872	99.20
65	1	0.11	873	99.32
Unknown	6	0.68	879	100.00
TOTAL	879	100.00		

The respondents' ages range from 26 to 65 years. Their mean age was 42.3 (SD = 8.55 years).

The respondents' gender distribution is shown in Table 3.10.

Table 3.10 Respondents' gender

Gender	Frequency	Percentage	Cumulative Frequency	Cumulative Percent
Male	813	92.49	813	92.49
Female	64	7.28	877	99.77
Unknown	2	0.23	879	100.00
Total	879	100.00		

The vast majority of respondents were males (n = 813), representing 92.7% of the total sample.

The respondents' race distribution is shown in Table 3.11.

Table 3.11 Subordinates' race

Race	Frequency	Percentage	Cumulative Frequency	Cumulative Percent
Black	40	4.55	40	4.55
White	805	91.58	845	96.13
Asian	24	2.73	869	98.86
Coloured	7	0.80	876	99.66
Other	2	0.23	878	99.89
Unknown	1	0.11	879	100.00
Total	879	100.00		

The majority of subordinates are from the white racial group (n = 805), followed by the black group (n = 24), representing 91.58% and 2.73% of the sample respectively.

The hierarchical level in which the subordinates function is shown in Table 3.12.

Table 3.12 Respondents' hierarchical level.

Level in Organisation	Frequency	Percentage	Cumulative Frequency	Cumulative Percent
Level 2	13	1.48	13	1.48
Level 3	79	8.99	92	10.47
Level 4	247	28.10	339	38.57
Level 5	512	58.25	851	96.81
Level 6	21	2.39	872	99.20
Unknown	7	0.80	879	100.00
Total	879	100.00		

The majority of the subordinates in this sample are on Level 5 (n = 512) and Level 4 (n = 247) respectively, representing 58.25% and 28.10% of the

sample respectively. The top two subordinate hierarchical levels represented 10.47% of the total sample.

The subordinates' level of qualifications is shown in Table 3.13.

Table 3.13 Respondents' level of qualifications

Level of Qualification	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Secondary school	1	0.11	1	0.11
Std 10 or equivalent	24	2.73	25	2.84
Post-school certificate / diploma	187	21.27	212	24.12
Bachelor's degree or equivalent	250	28.44	462	52.56
Honours degree or equivalent	164	18.66	626	71.22
Masters degree or equivalent	214	24.35	840	95.56
Doctoral degree or equivalent	39	4.44	879	100.00

The largest single group of the subordinates (n = 250) have a Bachelor's degree or equivalent qualification, followed by subordinates with a masters degree or equivalent (n = 214). These two categories represent 28.44% and 24.35% respectively of the total sample.

The number of people who are directly reporting to the respondents is shown in Table 3.14.

Table 3.14 Number of people reporting directly to the respondent

Number of subordinates	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	248	28.21	248	28.21
1 - 5	386	43.92	634	72.13
6 - 10	179	20.36	813	92.49
11 - 15	39	4.44	852	96.93
16 - 20	11	1.25	863	98.18
21 - 30	8	0.91	871	99.09
31 - 100	8	0.91	879	100.0

The largest single group of respondents (n = 386) have between 1 and 5 individuals reporting directly to them, followed by respondents who have no direct subordinates (n = 248). These two respondent groupings represent 43.92% and 28.21% respectively of the whole sample. The number of subordinates range between 0 and 99, with a mean of 4.60 and a standard deviation of 7.80.

In addition to direct subordinates, the respondents may also be responsible for other people such as the direct subordinates' underlings as well as individuals farther down the hierarchy of the organisation or department he or she is responsible for. The number of people the respondent is responsible for in this way is shown in Table 3.15.

Table 3.15 Number of people the respondent is responsible for

Number of people responsible for	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 – 5	433	49.26	433	49.26
6 - 10	87	9.90	520	59.16
11 - 20	100	11.37	620	70.53
21 - 30	57	6.49	677	77.02
31 - 50	46	5.23	723	82.25
51 - 80	50	5.69	773	87.94
81 - 110	19	2.16	792	90.10
111 - 160	23	2.62	815	92.72
161 - 210	10	1.14	825	93.86
211 - 300	11	1.25	836	95.11
301 - 400	11	1.25	847	96.36
401 - 600	14	1.59	861	97.95
601 - 1000	10	1.14	871	99.09
1001 - 2000	5	0.57	876	99.6
2001 – 5000	0	0.00	876	99.6
5001 - 10000	3	0.34	879	100.00

The number of people the respondents were responsible for, ranged from 0 to 10 000, with a mean of 81.4 and a standard deviation of 512.50. For the range between 1 and 5, the highest frequency of respondents were reported (n = 433) (49.26% of the sample).

The number of people reporting directly to the respondent for the 6 - 10 category in Table 3.13 is given as 179, while the number of subordinates the respondent is responsible for, again for the 6 – 10 category, is given as 87. This

may seem contradictory. However the explanation lies in the way work is structured in this organisation. Many task and project teams are used continuously. It is therefore not uncommon for a leader to have more people reporting directly to him/her, but to have fewer subordinates he/she is responsible for.

The functional area within which the respondent is active is shown in Table 3.16.

Table 3.16 Respondent's current functional area

Functional area	Frequency	Percentage	Cumulative Frequency	Cumulative Percent
General Management	40	4.55	40	4.55
Human Resources	41	4.66	81	9.22
Production	104	11.83	185	21.05
Financial and Commercial	111	12.63	296	33.67
Marketing	83	9.44	379	43.12
Corporate Services	41	4.66	420	47.78
Engineering, Design or Project Management	210	23.89	630	71.67
Information Technology	41	4.66	671	76.34
Maintenance Services	82	9.33	753	85.67
Research and Development	69	7.85	822	93.52
Other	53	6.03	875	99.54
Unknown	4	0.46	879	100.00
Total	879	100.00		

The largest single groups of respondents are reported to be in Engineering, Design or Project Management (n = 210) and Financial and Commercial (n = 111) positions. These functions made up 23.89% and 12.63% respectively of the total sample.

3.4. Measuring Instruments

3.4.1. Three-dimensional CPE leadership behaviour scale

The 36-item CPE scale of Ekvall (1991) was used in this study. Ekvall and Arvonen (1991) reported the Cronbach Alphas of the three behaviour dimension structures as follows:

Factor 1: Change-centred behaviour, 0.94

Factor 2: Employee-centred behaviour, 0.93

Factor 3: Production-centred behaviour, 0.93.

Thirty six items describe the manager's behaviour. Each dimension is measured with 12 items. The answer is registered on a four-point Likert-type scale, ranging between 1 and 4, indicating how often the behaviour occurs e.g., 'not at all' to 'very often'. The instruction reads, "Give an objective description of your immediate superior (the person to whom you directly report), using the statements found in the questionnaire".

3.4.2. Visioning ability scale

The visioning ability scale (Thoms & Blasko, 1999) consisting of 12 items describing one factor was used in this study. The visioning ability scale was designed to measure the ability of an individual to create a positive and vivid vision of an organisation's future. Thoms and Blasko (1999) obtained Cronbach Alpha's of 0.87, 0.86, and 0.86, respectively on three different samples.

The measure of visioning ability is a self-rating scale (Thoms & Blasko, 1999). The scale's directions ask subjects to create a positive image in their minds of the organisation to which they belong, as it would appear six months in the future. The subjects are asked to rate their agreement with 12 statements that

relates to the image they created. A 5-point Likert-type scale anchored between strongly disagree (1) to strongly agree (5) is used (Thoms & Blasko, 1999).

3.4.3. OCB scale

The five-factor, 34 item OCB scale of Van Dyne, Graham and Dienesch (1994) was used in this study. A summary of the important psychometric variables is given in Table 3.17.

Table 3.17 Summary factor statistics for the OCB scale

Factor	Number of Items	Eigenvalue	Percentage of Variance Explained	Cronbach's Alpha
1 - Loyalty	7	8.77	16.2	.79
2 - Obedience	10	4.25	7.9	.83
3 – Social participation	5	2.70	5.0	.68
4 – Advocacy participation	7	2.15	4.0	.84
5 – Functional participation	5	1.64	3.0	.75

Note: From "Organisational citizenship behaviour: construct redefinition, measurement, and validation" by L. Van Dyne, W. S Graham & R. M. Dienesch, 1994, Academy of Management Journal, 37, (4), p 765.

Factor 1 contains 7 ***'loyalty'*** items, representing allegiance to an organisation and promotion of its interests.

Factor 2 contains 10 ***'obedience'*** items, representing respect for the rules and policies of an organisation and willingness to expend appropriate effort on its behalf.

Factors 3, 4, and 5 all reflect ***participation***, though in three different forms. Factor 3 – '***social participation***' - includes examples of behaviour such as attending meetings, engaging in positive communications with others, and involvement in other affiliative group activities. These items describe participation in the form of interpersonal and social contact (Van Dyne et al., 1994).

Van Dyne et al. (1994) labelled factor 4 ***'advocacy participation'***. The 7 items of factor 4 describe innovation, maintaining high standards, challenging others, and making suggestions for change-behaviours targeted at other members of an organisation and reflecting a willingness to be controversial.

Factor 5 Van Dyne et al. (1994) labelled ***'functional participation.'*** Each of the 5 items describes a form of participatory contribution in which individuals focus on themselves rather than others in their organisations but yet contribute to organisational effectiveness (Van Dyne et al., 1994). These personally focused behaviours include participation through performing additional work activities, self-development, and volunteering for special assignments.

3.4.4. Emotional intelligence scale

The scale used to measure leaders' emotional intelligence was developed by Rahim and Minors (personal communication, April 2001). Statistical and psychometric properties of this scale were not available at the time of writing. The authors of the instrument gave assurance that the scale is valid and reliable (Rahim & Minors, personal communication, April 2001).

The scale consists of five dimensions and forty items. The five dimensions are as follows:

1. Self-awareness (Items 1-8)
2. Self-regulation (Items 9-16)

3. Self-motivation (Items 17-24)
4. Empathy (Items 25-32)
5. Social skills (Items 33-40)

3.5. Procedures for Data Gathering

3.5.1. Sampling

The study sample was drawn from the top five supervisory and managerial layers in the organisation described above. The Group Human Resources department of the organisation provided an alphabetical list of the names, position levels and companies within which the people are working. In total there were 2155 people in the top hierarchical levels of this group of companies. Another research study occurred simultaneously with this study in this organisation. A random sample from the same 2155 people was drawn for the other study. The researcher in that study drew each third name from the alphabetical list of names to make up his study sample. This author took the remaining 1473 people as a study sample. It was decided not to include any participants from the other sample in this study to prevent response set, boredom, and resentment in participants. A sample of this magnitude was specifically chosen in order to make it possible to divide the total sample into smaller units.

3.5.2. Data Gathering

A questionnaire as posted to respondents through the internal mail of the organisation, consisting of an English cover letter (see Appendix A), and the four psychometric scales as described in 3.4. The questionnaire also requested biographical information of both the respondent and his/her leader (see Appendix B). A pre-addressed envelope was included for the return of the questionnaire. It was decided a-priori that a second reminder letter, pre-addressed envelope and a

copy of the same questionnaire would be send to the entire sample after two weeks, regardless of the response rate after two weeks. This was done to improve the response rate. A copy of the second reminder letter is included in Appendix C. Another three weeks were allowed for responses to be received after the second reminder was sent out. The participants completed the questionnaire anonymously and took part voluntarily. Participants could also request feedback of the research results (see Appendix B).

In total, 879 of these questionnaires were returned, representing a response rate of 61.25%.

The author and the study leaders planned and directed the analysis and the Research Support department of the University of Pretoria carried out the statistical analysis.

3.6. Procedures for Data Analysis

The distribution of the responses to the different measuring instruments were inspected by means of Proc Frequency and Proc Univariate in SAS and it seemed as if the distributions tend to deviate from normality. A conservative approach to the data analysis was therefore followed, that is, non-parametric statistics were used where appropriate. It should however be remembered that the multivariate parametric methods are seen as relatively robust against non-normality of distributions (Kerlinger & Lee, 2000).. For this reason it was regarded as safe to use parametric multi-variable approaches where appropriate

3.6.1. Research question 1

In order to analyse the data to answer research question 1, the structure and internal reliability of the three-dimensional leadership behaviour instrument was revalidated by means of Exploratory and Confirmatory Factor Analysis.

Exploratory Factor Analysis is used when one has obtained measures on a number of variables, and wants to identify the number and nature of the underlying factors. Exploratory Factor Analysis is therefore used to determine the underlying factor structure of a set of data or a construct.

The following steps were executed during the Exploratory Factor Analysis for the CPE construct. Eigenvalues > 1.00 were identified. "clear" breaks between the eigenvalues > 1.00 were identified by means of a Scree test. These identified breaks were taken as indications of the number of possible factors. A Principal Factor Analysis Direct with Direct Quartimin rotation was done according to the number of determined factors. For example, if the Scree test identifies that potentially three, four and five factors are present, then a Principal Factor Analysis is done on all the items specifying three, four and five factor solutions. The results of the Principal Factor Analysis is usually evaluated by taking the following into account: (a) items are identified which do not load ≥ 0.25 on any factor in any solution, as well as (b) those items loading ≥ 0.25 on more than one factor in any of the solutions. These identified items are left out of the following round of Principal Factor Analysis again carried out for the three, four and five factor solutions. With the results of this subsequent round of Principal Factor Analysis, the same decision rules are followed as in the previous round. Should an item not load ≥ 0.25 on any factor in any solution or load ≥ 0.25 on more than one factor in any solution, these factors are removed from further analysis. The process is repeated until no "problematic" items remain on any factor according to the described evaluative procedure.

These conventional rules were not followed in all the cases. This was due to the necessity to align the current approaches to those used by the authors of the original instruments. This is discussed further in 4.1.

For the visioning ability, EI and OCB scales, the structures were identified and validated by means of Exploratory Factor Analysis. The same decision rules as above were followed except that Confirmatory Factor analysis was not carried out on them. These analyses lead to a revalidation of the scales on the responses from this study sample.

Confirmatory Factor Analysis was subsequently applied to the three-dimensional leadership behaviour structure to determine the fit between the data and the factor structure obtained through Exploratory Factor Analysis. Once the underlying structure of a set of data has been obtained, Confirmatory Factor Analysis is used to determine how well the obtained structure fits the data.

Following this analysis, the structural fit indices of the Confirmatory Factor Analysis for this study is compared to the structural fit indexes of Confirmatory Factor Analyses done on the structures obtained by the founding authors of the CPE scale (Ekvall & Arvonen, 1991, 1994). In the latter cases the item loadings obtained by Ekvall and Arvonen (1991, 1994) are used on the responses obtained in the present study. If there are close comparisons between the Confirmatory Factor Analysis fit indices, one can deduce that the structure obtained for this study closely resembles those obtained in previous studies.

3.6.1.1. Proposition 1.1

In order to analyses the data to test proposition 1.1, whether the CPE scale of Ekvall (1991) is portable to a South African cultural setting, the results of the above Confirmatory Factor Analysis fit indices are interpreted. In addition,

coefficients of congruence were calculated. This method was developed to relate factors when only factor loadings are available (Gorsuch, 1983, p285). The formula is as follows:

$$C_{12} = \sum p_{v1}\, p_{v2} / (\sum p_{v1}^{2})^{½} (\sum p_{v2}^{2})^{½}$$

Where C_{12} is the coefficient of congruence between factor 1 (e.g. the employee-orientation factor of this study) and factor 2 (e.g. the employee-orientation factor of the Ekvall and Arvonen (1991) study). p_{v1} are the factor loadings for the first factor in the fist study, and p_{v2} are the factor loadings for the same factor in the second study. Coefficients of congruence are calculated between the three-factor leadership behaviour structure for this study and those of Ekvall and Arvonen (1991, 1994) and also between their structures. If high coefficients of congruence are obtained one can deduct that the structures are similar.

3.6.1.2. Proposition 1.2

In order to analyse the data to test proposition 1.2, cluster analysis using the SAS Fastclus procedure was carried out on the data obtained from the CPE measurements. This method is used to replicate the work Ekvall and Arvonen (1994) and Arvonen (1995) did to identify leadership behaviour clusters. Cluster analysis is a multivariate technique which primary purpose is to group respondents based on the characteristics they posses. It classifies objects so that each object is very similar to others in the cluster with respect to some predetermined selection criterion. In this study, the classifying criteria are similar strengths on each of the three CPE dimensions. The selection criteria are based on the mean values of

each cluster in the three leadership behaviour dimensions and related to the means and standard deviations of the total sample in the following way:

- More than 1 SD above the mean
- Between 1/2 and 1 SD above the mean
- Up to 1/2 SD above or below the mean
- Between 1/2 and 1 SD below the mean
- More than 1 SD below the mean

3.6.2. Research question 2

To analyse the data in order to answer research question 2, the Spearman rho correlation analysis technique and Step-wise Multiple Regression analyses were applied to analyse the relationships between the various dimensions of the constructs as depicted in the model of relationships between constructs studied (figure 2.1). The objective was to determine which of the behavioural dimensions in a construct have strong relations with behaviours in other constructs. Where strong positive correlation coefficients are identified between different construct dimensions, there would be strong predictive power between these behaviours.

3.6.3. Research question 3

Finally, to analyse the data in order to answer research question 3, N-Par One-way Analysis-of-variance was applied and the differences within specific demographic groupings were determined using the Kruskal Wallis test.

The results of the statistical analysis of the different instruments used for measuring the variables included in the study are presented in the following chapter.

4. CHAPTER 4 RESULTS

4.1. Introduction

This chapter describes the results of the analyses to find answers to the research questions. Firstly, some preliminary results are presented on the Exploratory Factor Analyses carried out on the responses to the psychometric instruments measuring the constructs included in the study. These were done to determine if the different constructs had the same number and kinds of dimensions, as were originally found by their respective authors. These results may also demonstrate the degree of portability of the scales across different cultures, or, at least, to the sample used in the present study.

Firstly, of particular importance is the Exploratory Factor Analysis results on the three-dimensional leadership behaviour scale which is a precursor to the subsequent Confirmatory Factor and other analyses which were done to answer research question 1.

Secondly, the results of the analysis to find answers to research question 2 are presented. The results of Spearman rho inter-correlations of the factor scale scores to determine the strength of the relationships between the three leadership behaviour dimensions as identified with the CPE model, and the EI of leaders, the visioning ability and OCB of subordinates, are presented. In addition, results of Stepwise Multiple Regression analyses of the respondents' scores on the sub-scales as dependent and the three leadership behaviour dimension scores as independent variables are presented.

Finally, the results of analyses to answer research question 3 are presented. The results of the N-Par One-way Analysis-of-Variance to determine differences in the scores on three leadership behaviour dimensions of different

demographic groups are presented. The values obtained through the calculation of Kruskall-Wallis tests were interpreted for this purpose.

4.2. Exploration of psychometric qualities of measuring instruments.

4.2.1. Three-dimensional Leadership Behaviour instrument

The psychometric qualities of the instrument measuring three-dimensional Leadership Behaviour were described earlier. To answer research question 1, that is, whether the Leadership Behaviour construct exists in the three-dimensional form and whether the questionnaire developed by Ekval and Arvonen (1991) had acceptable psychometric qualities when applied to a South African sample, Exploratory Factor Analysis was carried out on the responses of the sample (N = 879). The Principal Factor Analysis approach was used, as this is the procedure recommended when an attempt is made to determine the number and contents of factors measured by an instrument. An oblique rotation of the axes was utilised as it was thought unlikely that the dimensions measured would be independent from each other. An orthogonal rotation method would, under these circumstances, probably provide a distorted picture of the factor structure underlying the measurements.

It should be remembered that Ekvall and Arvonen (1991, 1994) did not follow the conventional decision rules with regard to the inclusion or exclusion of items in dimensions or factors. It seems as if these authors concluded that items that loaded > 0.50 on any factor should be regarded as part of that factor regardless of its loadings on other factors. This necessitated the development of rules to be used in the present study which are not as rigorous as those used conventionally, but which were less "liberal" than those used by Ekvall and Arvonen (1991, 1994). It should also be noted that Ekvall and Arvonen (1991,

1994) used Varimax, an orthogonal rotation of the axes. They found that these three factors, which they identified, correlated quite highly with each other. It was therefore decided to use oblique rotation of the axes in the present analyses. Only where the direct comparison was to be made, e.g. where the factor loadings of individual items were to be compared, would orthogonal rotation be used.

The BMDP 4 M programme with Direct Quartimin rotation was used to execute the Exploratory Factor Analyses.

In the first round of analysis a four-factor solution was specified as four eigenvalues > 1.0 were obtained. These eigenvalues were respectively 13.314, 3.385, 2.599, and 1.136. The fourth factor contained only two items with loadings > .25. Both these items cross-loaded > .50 on other factors. A Chronbach Alpha could therefore not be calculated for factor four. This solution was therefore not pursued any further. It was decided to extract one as well as three factors during the next round of analysis. The existence of three factors would be in accordance with the findings of the authors of the instrument. When a one-factor solution was specified, all the items, except item V8 loaded > .25 on the factor. This was interpreted to imply that the items all form part of one underlying construct, namely leadership behaviour.

In the three-factor solution, items V12, V21, V18, V29, V35 and V39 loaded > .25 on more than one of the three factors extracted. A rule for exclusion of cross-loading items was developed. It was decided that when the difference between the two highest loadings for any item was < .20, that item would be discarded. Application of this rule led to the decision to leave items V18, V29 and V39 out of further analyses.

A second round of Exploratory Factor Analysis was carried out with a three-factor solution again specified. This resulted in a three-factor solution in which 15

items loaded between .390 and .819 on factor one, 9 items loading between .541 and .846 on factor two and 9 items loading between .539 and .742 on factor three.

The three factors decided upon had Cronbach Alpha coefficients of .919, .901 and .859 respectively. This compares favourably with the Cronbach Alpha coefficients (.75, .85, and .76) obtained by Ekvall and Arvonen (1994) and (.88, .91 and .85) of Arvonen (1995).

The three factors correlated quite highly with each other. Factor one correlated .529 and .303 with factors 2 and 3 respectively. Factor 2 correlated .254 with factor 3. Ekvall and Arvonen (1994), in spite of using a Varimax rotation, also found that the three factors correlated highly with each other (factor one correlated .43 and .23 with factors 2 and 3, while factor two correlated .38 with factor 3).

The three factors respectively explained 35,96%, 8.14% and 6.31% of the total variance. Skogstad and Einarsen (1999) report that the three factors respectively explained 57,1%, 2.8% and 3.5% of the total variance in their study. These findings contradict Ekvall and Arvonen's (1991) finding where the three factors accounted for 34%, 33% and 25% of the total variance respectively. In the Skogstad and Einarsen (1999) study 63,4% of the total variance was explained and the present findings 50,4% of total variance was explained, with both figures numerically substantially lower than the 92% found by Ekvall and Arvonen (1991).

The three-factor structure consisted of factors interpreted as factor 1: employee-centred, factor 2: change-centred, and factor 3: production-centred. The factor pattern is shown in Table 4.1.

Table 4.1 Factor pattern of three dimensional leadership behaviour items in a three factor solution (N = 879)

Item	Factor 1	Factor 2	Factor 3
V37	.819		
V22	.815		
V31	.748		
V10	.725		
V16	.700		
V28	.664		
V13	.641		
V4	.636		
V12	.633		
V5	.607		
V34	.557		
V35	.513		
V25	.505		
V26		.846	
V23		.744	
V38		.706	
V11		.687	
V8		.657	
V14		.654	
V20		.569	
V32		.548	
V17		.541	
V24			.742
V33			.664
V27			.617
V36			.611
V15			.607
V6			.575
V30			.556
V9			.540
V21			.539
V19	.488		
V7	.390		

The three-factor structure in Table 4.1 was used for further analyses in order to answer research questions 2 and 3.

Table 4.2 shows a comparison of the items (indicated by the item numbers in the Ekvall and Arvonen (1991) scale), had their highest loadings on each factor in the three-factor structures for this study and the structures obtained by Ekvall and Arvonen (1991, 1994).

Table 4.2 Item comparisons within factors between this study and structures obtained by Ekvall and Arvon's (1991, 1994) studies

		Employee-centred Behaviour			Change-centred Behaviour			Production-centred Behaviour		
Item No.	V No.	1991*	1994#	This study	1991*	1994#	This study	1991*	1994#	This study
1	V4	.55	.52	.64						
2	V5		.58	.61						
3	V6							.58	.57	.58
4	V7	.53	.53	.39						
5	V8				.57	.52	.69			
6	V9							.51	.53	.54
7	V10	.51	.52	.73						
8	V11				.59	.56	.71			
9	V12			.63					.51	
10	V13			.64						
11	V14				.58	.54	.66			
12	V15							.57	.56	.61
13	V16	.60	.55	.70						
14	V17				.55	.56	.55			
15	V18									
16	V19			.49						
17	V20				.74	.69	.65			
18	V21							.52	.54	.54
19	V22	.69	.62	.82						

Table 4.2 Item comparisons within factors between this study and structures obtained by Ekvall and Arvon's (1991, 1994) studies - Continued.

		Employee-centred Behaviour			Change-centred Behaviour			Production-centred Behaviour		
Item No.	V No.	1991*	1994#	This study	1991*	1994#	This study	1991*	1994#	This study
20	V23				.73	.67	.74			
21	V24						.54	.62		
22	V25	.53	.56	.51						
23	V26				.67	.65	.85			
24	V27							.55	.57	.62
25	V28	.63	.59	.66						
26	V29				.57	.52				
27	V30							.60	.60	.56
28	V31	.63	.64	.75						
29	V32				.60	.52	.57			
30	V33							.69	.69	.74
31	V34	.50	.55	.56						
32	V35	.57	.52	.52						
33	V36							.62	.61	.61
34	V37	.75	.73	.82	.74	.71				
35	V38									
36	V39						.53			

Note: * Designates Ekvall & Arvonen's (1991) results.
Designates Ekvall & Arvonen's (1994) results.

Item by item comparisons of factor loadings between this study's structure and those of Ekvall and Arvon's (1991, 1994) show that there appear to be quite some similarity in the factor loading patterns over the three studies. Further

analyses on the structure of the instrument will be reported under section 4.3.1 where answers to research question one are presented.

4.2.2. Visioning ability scale

Visioning ability was, as indicated in Chapter 3, measured by means of a 12-item questionnaire developed by Thoms and Blasko (1999).

The responses to the items of the instrument of the total sample (N=879) were analysed by means of Exploratory Factor Analysis using the Principal Factor method. In the first round of the analysis of the responses a preliminary Scree Test was carried out by means of the BMDP 4 M programme with Direct Quartimin Rotation. This indicated that two eigenvalues > 1.00 existed i.e. 5.67, and 1.27. A clear "break" was apparently present between the first and second largest eigenvalues.

A two-factor, as well as a one-factor solution was therefore specified. In the two-factor solution 8 items had a loading of > 0.25 on factor one. Two items had loadings of > 0.25 on factor 2. No items were cross loading on the two factors. Of the 8 items loading on only factor one had a Cronbach Alpha coefficient of .878 and the 2 items belonging to factor 2 had a Cronbach Alpha of .798. If the 10 items without cross-loadings were taken to represent a single scale a Cronbach Alpha Coefficient of .883 was obtained. This indicated that the items' scores were probably quite highly related to each other and possibly formed part of the same facet.

Because the second factor in the two-factor solution contained only two items this solution was discarded as inadequate. In the one-factor solution, which was subsequently specified, all 12 items of the questionnaire loaded > 0.25 on the one factor extracted. No item was therefore discarded. The items in the one-

factor solution had a Cronbach Alpha of .897. The one-factor solution explained 42.58% of the total variance. The existence of one factor would be in accordance with the findings of the authors of the instrument. The factor pattern for the one factor solution is shown in Table 4.3.

Table 4.3 Factor pattern for one factor solution of responses to visioning ability items (N = 879)

Item	Loading
V95	.786
V92	.733
V89	.727
V98	.674
V97	.662
V90	.642
V91	.637
V94	.635
V93	.599
V87	.576
V88	.560
V96	.554

In the Thoms and Blasko (1999) study 42,55 % of the total variance was explained (42.58% for this sample). The Cronbach Alpha, internal reliably coefficients ranged between .86 and .87 (.897 for this sample). It would therefore seem that the visioning ability scale is portable to a South African context, or at least to this sample, because the factor structure for this sample is almost identical to the one found by Thoms and Blasko (1999).

4.2.3. Emotional Intelligence Scale

The psychometric qualities of the instrument measuring emotional intelligence are described in Chapter 3. To determine whether the emotional

intelligence construct exists in a five-dimensional form, and whether the questionnaire developed by Rahim and Minors (personal communication, April, 2001) had acceptable construct validity and other psychometric qualities when applied to a South African sample, Exploratory Factor Analysis was carried out on the responses of the total sample (N = 879) to the items in the questionnaire. The analysis was specified and executed by means of the BMDP 4 M programme with Direct Quartimin Rotation.

In the first round of Factor Analysis five eigenvalues > 1.0 were obtained. These eigenvalues were respectively 18.286, 3.353, 1.940, 1.484 and 1.149. A five-factor solution was specified during this round.

The fifth factor obtained contained only one item with a loading > .50. It was therefore decided to discard the five-factor solution. In the next phase of analysis a four-factor solution was specified. In this four-factor solution, items V49, V50, V51, V56, V67, V71, V72, V77, V78, V79, V80, V81, V82 and V83 loaded > .25 on more than one of the four factors extracted. It was decided that an item would be discarded when the difference between the two highest cross-loadings for any item was < .20. This rule led to the decision to leave items V49, V50, V51, V56, V71, V72, V77, V80 and V83 out of further analyses.

A second round of Exploratory Factor Analysis was carried out with a four-factor solution again specified. This resulted in a four-factor solution in which 9 items loaded between .523 and .884 on factor one, 7 items loading on factor two between .539 and .844 and 5 items loading on factor three between .553 and .907 with 5 items that loaded on factor four between .541 and .840. The existence of a four-factor structure based on the responses of the present sample is not in accordance with the findings of the authors of the instrument, who apparently found five factors.

The four factors had Cronbach Alpha coefficients of .929, .925, .932 and .843 respectively. The four factors correlated quite highly with each other. Factor one correlated .430, .500 and .498 with factors 2, 3 and 4 respectively. Factor 2 correlated .588 and .586 with factor 3 and 4 respectively. Factor 3 correlated .620 with factor 4. The four factors respectively explained 44.17%, 9.27%, 4.67% and 3.12% of the total variance, and 72.14%, 15.14%, 7.64% and 5.09% of the common variance. The four-factor structure consisted of factors interpreted as factor 1: self-motivation, factor 2: self-regulation, factor 3: empathy and factor 4: self-awareness. The fifth factor, social skills, was not found for the sample in this study. The factor pattern is shown in Table 4.4.

Table 4.4 Factor pattern for four-factor solution of responses to emotional intelligence items (N = 879)

Item	Factor 1	Factor 2	Factor 3	Factor 4
V63	.884			
V60	.853			
V66	.846			
V65	.833			
V64	.797			
V62	.763			
V61	.587			
V67	.552			
V81	.520			
V58		.844		
V55		.836		
V53		.825		
V59		.797		
V52		.781		
V54		.698		
V79		.539		
V69			.907	
V68			.846	
V70			.832	
V75			.618	
V74			.553	
V45				.840
V44				.764
V48				.617
V47				.568
V46				.541
V76		.419		
V78		.496		
V73			.458	
V57	.419			
V82	.410			

4.2.4. Organisational Citizenship Behaviour Scale

Organisational citizenship behaviour was, as indicated in Chapter 3, measured by means of a 34 item questionnaire developed by Van Dyne, Graham and Dienesch (1994).

To determine whether the OCB construct exists in the five-dimensional form, and whether the questionnaire developed by Van Dyne, Graham and Dienesch (1994) had acceptable psychometric qualities when applied to a South African sample, Exploratory Factor Analysis using the Principal Factor method was carried out on the responses of the total sample (N = 879) to the items in the questionnaire.

In the first round of analysis five eigenvalues > 1.0 were obtained and a five-factor solution specified. These eigenvalues were respectively 6.565, 2.255, 1.998, 1.754 and 1.308. In this solution the fourth and fifth factors each contained only two items with a loading > .25. Items V111, V112, V132, V113, V99 and V108 did not load satisfactorily (> .25) on any factor extracted. No items cross-loaded > .25 on more than one factor. The five factors explained only 32.19% of the total variance. The five factors had Cronbach Alpha coefficients of .772, .790, .689, .782, and .645 respectively. Two of the Cronbach Alphas were < .7.

It was therefore decided to extract three factors in another round of analysis. In the three-factor solution obtained, only item V126 did not load > .25 on any one of the factors extracted. The following rule for exclusion of cross-loading items was again applied: an item would be discarded if the difference between the two highest cross-loadings for that item was < .20. However, no item cross-loaded on more than one factor. The three factors explained only 29.3% of the total variance. The three factors had Cronbach Alpha coefficients of .772, .790 and .689 respectively. One of the Cronbach Alphas was < 0.7.

A final round of Exploratory Factor Analysis was therefore carried out with a two-factor solution specified. This resulted in a two-factor solution in which 21 items loaded between .594 and .290 on factor one, with 7 items loading on factor two between .655 and .409. Items V99, V102, V112, V128, V129 and V130 did not load on any of the factors extracted in the final round. The existence of two factors for this sample in the current study is not in accordance with the findings of the authors of the instrument, who found five factors.

The two factors had Cronbach Alpha coefficients of .832 and .790 respectively. The two factors correlated quite highly with one another. Factor one correlated .434 with factor 2. The two factors respectively explained 18.9% and 5.42% of the total variance, and 77.7% and 22.3% of the common variance.

The two factor structure consisted of factors interpreted as factor 1: loyal participation, and factor 2: obedience. The factor pattern is shown in Table 4.5.

Table 4.5 Factor pattern for two-factor solution of responses to organisational citizenship behaviour items (N = 879)

Item	Factor 1	Factor 2
V107	.594	
V100	.560	
V101	.553	
V103	.538	
V105	.538	
V124		.655
V122		.633
V123		.622
V121		.605
V120		.564
V125		.556
V127		.409
V118	.323	
V117	.297	
V108	.289	
V110	.409	
V111	.335	
V126	.403	
V116	.421	
V104	.441	
V119	.252	
V132	.312	
V113	.358	
V115	.364	
V106	.465	
V109	.450	
V114	.475	
V131	.290	

The portability of the scale developed by Van Dyne, Graham and Dienesch (1994) to a South African context seems to be highly suspect due to the fact that

the same five-factor structure could not be replicated for this sample. Rather, a two-factor structure was found. Due to the fact that the obtained two-factor structure seems to represent the OCB of the sample, the factor structure as represented in Table 4.5 was used for further analyses in order to answer research questions 2 and 3.

4.3. Results of analyses with regard to research questions

4.3.1. Research Question 1

In order to answer research question 1, that is, whether in leadership behaviour exist in a three dimensional form as identified by the CPE model in a sample of South African managers, Exploratory Factor Analysis was done on the sample first. For the full explanation of the Exploratory Factor Analysis results refer to 4.2.1. A similar three-factor structure like those found by Ekvall and Arvonen (1991, 1994), Arvonen (1995) and Skogstad and Einarson (1999) was obtained for this study. Secondly, Confirmatory Factor Analysis was carried out on the three-factor structure obtained by Exploratory Factor Analysis. The results of the Confirmatory Factor Analysis are explained below.

4.3.1.1. Proposition 1.1:

In order to test proposition 1.1 (that is, whether measurements included in the CPE scale of Ekvall (1991) is fully transportable to a South African cultural setting two statistical methods were employed. The first statistical method involves the matching of structures for similarity by means of Confirmatory Factor Analysis (Gorsuch, 1983, p 285). Firstly, Confirmatory Factor Analysis using the SAS Proc Callis procedure was done on the three-factor structure obtained by Exploratory Factor Analysis on the responses of the respondents in the present study. Secondly, the item loadings obtained by Ekvall and Arvonen (1991, 1994) were

used to carry out Confirmatory Factor Analysis on the responses of the sample (N = 879) in the present study. The CFA indices obtained from these analyses were then compared. The results of these analyses yielded the indices shown in Table 4.6.

Table 4.6 Results of Confirmatory Factor Analyses of the three-factor structure of the leadership behaviour questionnaire for this study and compared to studies done by Ekvall and Arvonen (1991, 1994)

Indices	This study (N = 879)	Ekvall & Arvonen (1991) (N = 711)	Ekvall & Arvonen (1994) (N = 3857)
Fit criterion	3.5712	4.2272	3.7646
Goodness of fit index (GFI)	.8022	.7813	.8046
GFI adjusted for degrees of freedom (AGFI)	.7739	.7512	.7766
Root Mean Square Residual (RMR)	.2396	.2441	.2555
Parsimonious GFI (Mulaik, 1989)	.7487	.7309	.7509
Chi-square	3135	3711	3305
Chi-square df	434	464	434
Pr > Chi-square	<0.0001	<0.0001	<0.0001
Independence model chi-square	14835	15646	15232
Independence model chi-square df	465	496	465
RMSEA estimate	.0842	.0893	.0868
RMSEA 90% lower confidence limit	.0814	.0866	.0841
RMSEA 90% upper confidence limit	.0870	.0920	.0896
ECVI estimate	3.7178	4.3787	3.9111
ECVI 90% lower confidence limit	3.5163	4.1581	3.7037
ECVI 90% upper confidence limit	3.9281	4.6082	4.1274
Bentler's comparative fit index	.8120	.7856	.8056
Normal theory reweighted LS chi-square	3365	3931	3305
Akaike's information criterion	2267	2783	2437
Bozdogan's (1987) CAIC	-240	102	-70
Schwartz's Bayesian criterion	.193.5	566	363

McDonald's (1989) centrality	.2151	.1577	.1953
Bentler and Bonnett's (1980) Non-normed index	.7986	.7709	.7917
Bentler and Bonnett's (1980) NFI	.7886	.7628	.7830
James, Mulaik & Brett (1982) parsimonious NFI	.7361	.7136	.7308
Z-test of Wilson & Hilferty (1931)	41.26	45.71	42.78
Bollen (1986) Normed Index RHO1	.7735	.7464	.7675
Bollen (1988) Non-normed index delta2	.8124	.7861	.8060
Hoelter's (1983) critical n	137	123	130

The indices shown in Table 4.6 reflect a promising fit between the data obtained and the three-factor structure for this study. Secondly, the CFA fit indices for the three structures are very close to each other, indicating that the structures are very similar to one another.

The second statistical method employed for testing proposition 1.1 was the calculation of the Coefficient of Congruence (Gorsuch, 1983, p285). Coefficients of Congruence are calculated between the loadings obtained from the three studies on each of the three factors (dimensions) measured by the instrument. The Coefficients of Congruence are shown in Table 4.7.

Table 4.7 Coefficients of Congruence compared for the three-factor leadership behaviour structures (N = 879)

Change-centerd leadership behaviour			
	Ekvall & Arvonen (1991)	Ekvall & Arvonen (1994)	Current study
Ekvall & Arvonen (1991)	1.0		
Ekvall & Arvonen (1994)	.9888	1.0	
Current study	.9242	.9253	1.0
Employee centred leadership behaviour			
	Ekvall & Arvonen (1991)	Ekvall & Arvonen (1994)	Current study
Ekvall & Arvonen (1991)	1.0		
Ekvall & Arvonen (1994)	.9888	1.0	
Current study	.9679	.9488	1.0
Production-centred leadership behaviour			
	Ekvall & Arvonen (1991)	Ekvall & Arvonen (1994)	Current study
Ekvall & Arvonen (1991)	1.0		
Ekvall & Arvonen (1994)	.9600	1.0	
Current study	.9493	.9197	1.0

From Table 4.7 it is evident that there is very high congruence between these three factor structures.

4.3.1.2. Proposition 1.2

In order to test Proposition 1.2, whether different leadership style groupings exists, where each grouping can be identified with a distinctive combination of the three behavioural dimensions, Cluster Analysis using the SAS Fastclus procedure was carried out on responses of the current study to the Ekvall and Arvonen (1991) scale.

In order to replicate the findings of Ekvall and Arvonen (1994) a ten-cluster structure was decided upon. The same cluster selection criteria as employed by Ekvall and Arvonen (1994) were used. The 10 profiles, corresponding to the clusters, with their mean values are presented in Table 4.8.

Table 4.8 Clusters of leadership profiles, mean values (scale 1 - 4), number and percentage (N = 879)

Cluster	Profile	Leadership style variable				
		Change Oriented	Relations Oriented	Structure Oriented		
		M	M	M	N	% of sample
1	Laissez-faire	1.98	1.70	1.64	29	3.30
2	Bureaucrat	2.04	1.95	2.66	23	2.62
3	Nice Guy	1.67	2.14	1.42	18	2.05
4	Creative	3.26	2.47	1.98	49	5.57
5	Middle-of-the-road	2.11	2.63	2.28	79	8.99
6	Manage-by-objectives	3.14	2.64	2.90	77	8.76
7	Transformational	2.79	3.07	1.89	83	9.44
8	Humanist	2.86	3.30	2.72	184	20.93
9	Charismatic	3.55	3.45	2.41	180	20.48
10	Super	3.62	3.67	3.14	157	17.86

Of the ten clusters, seven were found to be similar to the clusters Ekvall and Arvonen (1994) found and six were found to be similar to the clusters Arvonen (1995) found in their studies and were named accordingly. A comparison between this study and Ekvall and Arvonen's (1994) and Arvonen's (1995) studies' mean scores indicate that the entrepreneurial and transactional leader profiles do not feature in the present sample. Instead, an additional profile is identified, profile 9, named 'Charismatic' leaders. These are leaders with high mean scores on the change-oriented and relations-oriented leader behaviour dimensions, but relatively

lower mean scores on the structure-oriented leadership behaviour dimension. This cluster of leaders seems to focus their attention more on change and people issues and less on tasks or production.

From the cluster analysis results it seems that most leaders belong to the Humanist (20.93%), Charismatic (20,48%) and Super leader (17.86%) clusters. Of the less desirable leadership style groupings, only 3.30% of leaders in this sample belong to the Laissez-faire, Bureaucrat (2.62%) and Nice Guy (2.05%) clusters.

4.3.2. Research Question 2

In order to investigate the relationships between the three leadership behaviour styles as identified with the CPE model and EI of managers, as well as the visioning ability and organisational citizenship behaviour of subordinates, the following procedures were followed:

- Correlation coefficients between the scale and sub-scale scores of the four constructs were calculated by means of Spearman rho; and
- Step-wise Multiple Regression were carried out with scale and sub-scale scores as dependent variables and the three-dimensional leadership behaviour scores as independent (predictor) variables.

The coefficients of determination (100 x r^2) derived from the correlation Spearman Rho coefficients are shown in Table 4.9. (Coefficients of determination indicate the percentage common variance between the different variables correlating with each other.)

Table 4.9. Results from Spearman Coefficients of Determination of factor variables (N = 879)

	L1 Employee Centered	L2 Change Centered	L3 Production Centered	Visioning Ability	OCB1 Loyal Participation	OCB2 Obedience	OCB Total	EI1 Motivation	EI2 Self-Regulation	EI3 Empathy	EI4 Self-Awareness	EI Total
L1 - Employee-Centered	100.0											
L2 - Change-Centered	34.2	100.0										
L3 - Production-Centered	18.3	13.7	100.0									
Visioning Ability	3.2	4.2	2.7	100.0								
OCB1 - Loyal Participation	6.0	7.2	4.2	25.0	100.0							
OCB2 - Obedience	1.5	0.7	7.2	7.0	22.0	100.0						
OCB -Total	5.2	5.6	7.1	22.8	87.8	53.3	100.0					
EI1 - Self-motivation	34.0	62.4	19.6	5.9	8.3	2.5	7.9	100.0				
EI2 - Self-regulation	40.6	13.6	10.4	1.8	2.9	1.1	3.0	27.0	100.0			
EI3 - Empathy	56.1	23.3	11.2	2.9	6.1	1.6	5.3	34.2	46.6	100.0		
EI4 - Self-awareness	30.7	17.6	11.2	3.5	7.3	2.3	7.0	27.2	37.0	44.0	100.0	
EI - Total	57.2	40.8	19.0	4.7	8.1	2.3	7.6	66.6	72.1	74.3	59.8	100.0

Note: All Correlations are at $p < .0001$

These relationships are interpreted in terms of the conceptual significance as all the correlations are statistically significant due to the large N.

Less that 5% is seen as a low conceptual correlation

6 - 10% is seen as a useful conceptual correlation

11 - 15% is seen as a moderate conceptual correlation

16 – 25% is seen as a high conceptual correlation

> 26 % is seen as a very high conceptual correlation

From table 4.9 it can be seen that of the correlations calculated between the sub-scale scores for leadership behaviour, 6 correlations with the emotional intelligence sub-scales were conceptually significant at the 95% confidence level ($p < 0001$). The common variances varied between 10.4% and 62.4%.

The employee-centred leadership behaviour sub-scale is conceptually significantly related to all four of the emotional Intelligence sub-scales for the leader. The common variances were conceptually very high, varying between 30.7% and 56.1%.

The change-centred leadership behaviour sub-scale is conceptually significantly related to the motivation and empathy sub-scales of the leader EI. The common variances are high to very high, 23.3% and 62.4% respectively.

The total scores on the emotional Intelligence questionnaire are conceptually significantly related at the 95% confidence level to the three leadership behaviour sub-scales. The common variances vary between high and very high, varying between 19.0% and 57.2%.

The leadership behaviour sub-scales do not illustrate conceptually significant relations to the visioning ability scale for subordinates, or to the self-reported OCB sub-scales measured for sub-ordinates.

The visioning ability scale showes a significant relationship at the 95% confidence level with the loyal participation OCB sub-scale for sub-ordinates. The common variance explained was 25%.

To further analyse the relationship between the factors of the three-dimensional leadership behaviour construct as independent variables and the sub-scales of the other constructs as dependent variables, a Stepwise Multiple Regression Analysis was done. Kaplan (1990, p. 282) explains the meaning of each column in Table 4.10 depicting the stepwise regression analysis results as follows:

Variable: The first column lists the independent variable entered into the Multiple Regression Model at each stage.

Dependent variable: The second column lists the different dependent variables.

Partial R^2 : This column records each independent variable's unique contribution to the model. That is the degree of common variance between the particular independent variable and the dependent variable after controlling for variance that has already been accounted for by independent variables entered into the equation at earlier steps.

Model R^2: This shows the combined strength of the independent variables' "prediction" of the dependent variable. It is the variation in the dependent variable that is attributed to variation in the independent variables in the model.

C_p: The Cp statistic at each step is recorded in the next column. It denotes a good fit where the value of Cp first approaches the number of variables in the model, including the intercept (this number is represented by the letter p).

F: The F value is the ratio of the regression mean square to the error mean square, and indicates the strength of the prediction level when the independent

variable is entered in each step and the prediction level without that independent variable.

Prop > F: The final column gives an indication of the significance of the growth in R^2 calculated at each step. It is an estimate of the probability of a larger F value occurring by change.

A summary of the step-wise procedure for the total sample (N = 879) is given in Table 4.10.

Table 4.10 Summary of Stepwise Multiple Regression Analysis of Three-dimensional Leadership Behaviour as independent variables on various dependent variables (N = 879)

Leadership Variable	Dependent variable	Partial R^2	Model R^2	C_p:	F	Prop > F
	Visioning Ability					
L2		0.040	.040	11.27	36.51	<.0001
L3		.010	.050	3.50	9.76	0.0018
	OCB 1 Loyal Participation					
L2		.064	.064	19.84	59.98	<.0001
L1		.015	.079	7.62	14.14	.0002
L3		.006	.085	4.00	5.62	.0179
	OCB 2 Obedience					
L3		.069	.069	1.407	64.85	<.0001
	OCB Total					
L3		.0645	.0645	21.14	60.42	<.0001
L2		.0190	.0834	4.99	18.11	<.0001
	EI 1 – Self-motivation					
L2		.662	.662	102.02	1716.01	<.0001
L3		.024	.685	36.14	65.40	<.0001
L1		.012	.697	4.00	34.14	<.0001

Table 4.10. Summary of Stepwise Multiple Regression Analysis of Three-dimensional Leadership Behaviour as independent variables on various dependent variables (N = 879). Continued.

Leadership Variable	Dependent variable	Partial R^2	Model R^2	C_p:	F	Prop > F
	EI 2 - Self-regulation					
L1		.430	.430	7.46	656.78	<.0001
L3		.004	.432	3.15	6.31	.0122
	EI 3 - Empathy					
L1		.587	.587	4.912	1244.09	<.0001
L2		.002	.589	2.159	4.76	.0294
	EI 4 - Self-awareness					
L1		.322	.322	23.062	416.44	<.0001
L3		.011	.333	10.463	14.48	.0002
L2		.006	.339	4.000	8.46	.0037
	EI 4 - Total					
L1		.606	.606	167.81	1346.23	<.0001
L2		.057	.662	20.26	146.65	<.0001
L3		.007	.669	4.00	18.27	<.0001

From Table 4.10 it can be seen that the scores on the emotional intelligence sub-scales and the total emotional intelligence scale were predicted to a substantial degree by means of the leadership behaviour sub-scales as

independent variables included in the multiple regression model. The motivation, self-regulation, empathy and self-awareness sub-scales were predicted, 69.7%, 43,2%, 58,9% and 33,9% by the three leadership behaviour scales. Total leader emotional intelligence was predicted 66,9% by leadership behaviour.

The predictions of the visioning ability and OCB of subordinates scales and sub-scales did not reach 10% common variance in any case.

4.3.3. Research Question 3

Finally, in order to answer research question 3, that is, to determine whether differences in the three leadership behaviour dimension scores existed among different demographic groupings the non-parametric N-par one-way Analysis-of-variance procedure in SAS was applied. Results from the Kruskal Wallis test were interpreted.

The results of the N-par one-way Analysis-of-variance and Kruskal Wallis tests are presented in Tables 4.11 to 4.26.

Table 4.11 Relationship between Leaders' age and their leadership behaviour (N = 879)

Leader's Age group	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
51-55	161	475.5	Chi-square	8.775
27-30	16	464.0	Df	6
46-50	197	424.9	Pr > Chi-square	0.187
36-40	169	423.6		
31-35	56	417.4		
41-45	190	408.3		
> 55	67	396.4		
Variable: Change-Centred Leader behaviour				
27-30	16	492.6	Chi-square	8.357
31-35	56	462.2	Df	6
41-45	190	458.8	Pr > Chi-square	0.213
46-50	197	423.2		
36-40	169	420.7		
51-55	161	405.9		
> 55	67	388.3		
Variable: Production-Centred Leader behaviour				
27-30	16	535.1	Chi-square	12.287
31-35	56	433.3	Df	6
51-55	161	432.2	Pr > Chi-square	0.056
> 55	67	432.2		
46-50	197	421.0		
36-40	169	408.2		
41-45	190	402.8		

Table 4.12 Relationship between Respondents' age and of their assessment of their leaders' leadership behaviour (N = 879)

Respondent's Age group	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
27 - 30	92	466.1	Chi-square	2.153
41 - 45	180	448.9	Df	6
> 55	59	445.9	Pr > Chi-square	.905
36 - 40	143	439.6		
51 - 55	100	437.1		
31- 35	144	431.8		
46 - 50	161	422.5		
Variable: Change-Centred Leader behaviour				
> 55	59	471.5	Chi-square	8.467
51 - 55	100	470.1	Df	6
41 - 45	180	459.4	Pr > Chi-square	.206
36 - 40	143	444.5		
46 - 50	161	438.3		
31- 35	144	404.4		
27 - 30	92	400.8		
Variable: Production-Centred Leader behaviour				
46 - 50	161	474.1	Chi-square	12.864
51 - 55	100	469.9	Df	6
41 - 45	180	451.8	Pr > Chi-square	.045
> 55	59	444.4		
36 - 40	143	433.4		
27 - 30	92	423.8		
31- 35	144	381.5		

Table 4.13 Relationship between Leaders' gender and their leadership behaviour (N = 879)

Leaders' gender	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Male	848	441.6	Chi-square	1.015
Female	31	394.9	Df	1
			Pr > Chi-square	.314
Variable: Change-Centred Leader behaviour				
Male	848	440.8	Chi-square	.217
Female	31	419.2	Df	1
			Pr > Chi-square	.642
Variable: Production-Centred Leader behaviour				
Male	848	440.8	Chi-square	.294
Female	31	415.8	Df	1
			Pr > Chi-square	.588

Table 4.14 Relationship between Respondents' Gender and their assessment of their leaders' leadership behaviour (N = 879)

Respondent's gender	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Male	813	441.1	Chi-square	.788
Female	64	411.9	Df	1
			Pr > Chi-square	.375
Variable: Change-Centred Leader behaviour				
Male	813	440.7	Chi-square	.528
Female	64	417.0	Df	1
			Pr > Chi-square	.468
Variable: Production-Centred Leader behaviour				
Male	813	444.8	Chi-square	5.794
Female	64	365.8	Df	1
			Pr > Chi-square	.016

Table 4.15 Relationship between Leaders' Race groups and their observed leadership behaviour (N = 879)

Leader's Race group	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Black	26	477.6	**Chi-square**	.612
Asian, Coloured and Other	21	442.4	**Df**	2
White	831	438.3	**Pr > Chi-square**	.736
Variable: Change-Centred Leader behaviour				
White	831	440.4	**Chi-square**	.240
Black	26	429.9	**Df**	2
Asian, Coloured and Other	21	415.2	**Pr > Chi-square**	.887
Variable: Production-Centred Leader behaviour				
Asian, Coloured and Other	21	468.6	**Chi-square**	1.608
White	831	440.5	**Df**	2
Black	26	382.6	**Pr > Chi-square**	.448

Table 4.16 Relationship between Respondents' Race groups and their assessment of their leaders' leadership behaviour (N = 879)

Respondent's Race group	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
White	805	445.4	**Chi-square**	5.878
Asian, Coloured and Other	33	398.2	**Df**	2
Black	40	343.9	**Pr > Chi-square**	.053
Variable: Change-Centred Leader behaviour				
White	805	444.7	**Chi-square**	6.453
Asian, Coloured and Other	33	432.7	**Df**	2
Black	40	340.7	**Pr > Chi-square**	.0397
Variable: Production-Centred Leader behaviour				
White	805	441.0	**Chi-square**	.465
Black	40	433.0	**Df**	2
Asian, Coloured and Other	33	411.2	**Pr > Chi-square**	.793

Table 4.17 Relationship between Leaders' Hierarchical level and their observed leadership behaviour (N = 879)

Leader's Hierarchical Level	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Level 4	156	473.8	Chi-square	7.090
Level 1	73	466.7	Df	4
Level 5	118	428.1	Pr > Chi-square	.131
Level 3	227	424.2		
Level 2	294	416.1		
Variable: Change-Centred Leader behaviour				
Level 3	227	473.2	Chi-square	12.218
Level 1	73	455.8	Df	4
Level 4	156	446.9	Pr > Chi-square	.016
Level 5	118	405.7		
Level 2	294	402.0		
Variable: Production-Centred Leader behaviour				
Level 4	156	454.3	Chi-square	6.657
Level 2	294	452.1	Df	4
Level 5	118	440.2	Pr > Chi-square	.155
Level 3	227	424.5		
Level 1	73	371.8		

Table 4.18 Relationship between Respondents' Hierarchical level and their assessment of their leaders' leadership behaviour (N = 879)

Respondent's Hierarchical level	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Level 3	79	520.0	Chi-square	10.120
Level 4	247	438.4	Df	4
Level 6	21	426.1	Pr > Chi-square	.037
Level 5	512	423.8		
Level 2	13	410.0		
Variable: Change-Centred Leader behaviour				
Level 3	247	483.2	Chi-square	10.155
Level 2	512	481.1	Df	4
Level 4	79	465.2	Pr > Chi-square	.038
Level 5	21	415.2		
Level 6	13	415.1		
Variable: Production-Centred Leader behaviour				
Level 6	13	473.1	Chi-square	3.327
Level 3	247	456.2	Df	4
Level 5	21	437.6	Pr > Chi-square	.505
Level 4	79	430.3		
Level 2	512	332.3		

Table 4.19 Relationship between Leaders' Level of Education and their leadership behaviour (N = 879)

Leader's Level of Education	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Honours degree or equiv.	156	473.8	**Chi-square**	7.090
Doctoral Degree or Equiv.	73	466.7	**Df**	4
Secondary School/ St10/Sertificate/Diploma	118	428.1	**Pr > Chi-square**	.1312
Masters Degree or equiv.	227	424.2		
Bachelor's degree or equiv.	294	416.1		
Variable: Change-Centred Leader behaviour				
Masters Degree or equiv.	227	473.2	**Chi-square**	12.218
Doctoral Degree or equiv.	73	455.8	**Df**	4
Honours degree or equiv.	156	446.9	**Pr > Chi-square**	.016
Bachelor's degree or equiv.	294	405.7		
Secondary School/ St10/Sertificate/Diploma	118	402.1		
Variable: Production-Centred Leader behaviour				
Honours degree or equiv.	156	454.3	**Chi-square**	6.657
Secondary School/ St10/Sertificate/Diploma	118	452.1	**Df**	4
Bachelor's degree or equiv.	294	440.2	**Pr > Chi-square**	.155
Masters Degree or equiv.	227	424.5		
Doctoral Degree or Equiv.	73	371.8		

Table 4.20 Relationship between Respondents' level of education and their assessment of their leaders' leadership behaviour (N = 879)

Respondent's level of education	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Secondary School or St10	25	473.0	**Chi-square**	1.180
Bachelor's degree or equiv.	250	448.9	**Df**	5
Doctoral Degree or Equiv.	39	447.3	**Pr > Chi-square**	.947
Honours degree or equiv.	164	439.3		
Masters Degree or equiv.	214	432.9		
Certificate or Diploma	187	430.7		
Variable: Change-Centred Leader behaviour				
Secondary School or St10	25	516.1	**Chi-square**	2.543
Bachelor's degree or equiv.	250	442.9	**Df**	5
Honours degree or equiv.	164	440.2	**Pr > Chi-square**	.770
Certificate or Diploma	187	435.3		
Doctoral Degree or Equiv.	39	434.1		
Masters Degree or equiv.	214	432.8		
Variable: Production-Centred Leader behaviour				
Secondary School or St10	25	601.1	**Chi-square**	44.421
Certificate or Diploma	187	509.1	**Df**	5
Bachelor's degree or equiv.	250	452.0	**Pr > Chi-square**	<.0001
Honours degree or equiv.	164	424.3		
Doctoral Degree or Equiv.	39	400.2		
Masters Degree or equiv.	214	366.0		

Table 4.21 Relationship between Leaders' number of direct subordinates and their observed leadership behaviour (N = 879)

Leader's number of direct subordinates	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
16 – 20	51	488.7	Chi-square	4.522
11 – 15	104	469.1	Df	4
1 – 5	259	430.5	Pr > Chi-square	.340
6 – 10	415	429.1		
21 +	45	423.8		
Variable: Change-Centred Leader behaviour				
16 – 20	51	488.9	Chi-square	9.385
11 – 15	104	488.6	Df	4
6 – 10	415	436.7	Pr > Chi-square	.052
21 +	45	415.1		
1 – 5	259	412.1		
Variable: Production-Centred Leader behaviour				
21 +	45	459.3	Chi-square	3.480
11 – 15	104	449.6	Df	4
6 – 10	415	447.2	Pr > Chi-square	.481
1 – 5	259	420.7		
16 – 20	51	400.0		

Table 4.22 Relationship between Respondents' number of direct subordinates and their assessment of their leaders' leadership behaviour (N = 879)

Respondent's number of direct subordinates	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
6 - 99	245	469.7	Chi-square	6.062
4 - 5	183	439.3	Df	3
0	248	434.7	Pr > Chi-square	.109
1 - 3	203	411.3		
Variable: Change-Centred Leader behaviour				
6 - 99	245	478.3	Chi-square	10.121
4 - 5	183	444.9	Df	3
0	248	427.0	Pr > Chi-square	.018
1 - 3	203	405.3		
Variable: Production-Centred Leader behaviour				
6 - 99	245	479.0	Chi-square	11.491
4 - 5	183	454.1	Df	3
0	248	414.7	Pr > Chi-square	.0093
1 - 3	203	411.1		

Table 4.23 Relationship between Leaders' number of people they are directly and indirectly responsible for and their observed leadership behaviour (N = 879)

Leader's number of people directly and indirectly responsible for.	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
1 -13	220	446.8	Chi-square	.974
51 - 198	200	439.7	Df	3
199 +	225	438.2	Pr > Chi-square	.808
14 - 50	228	423.9		
Variable: Change-Centred Leader behaviour				
199 +	228	472.2	Chi-square	10.016
51 - 198	200	453.3	Df	3
1 -13	225	419.6	Pr > Chi-square	.018
14 - 50	220	404.8		
Variable: Production-Centred Leader behaviour				
199 +	228	475.3	Chi-square	8.559
51 - 198	200	437.2	Df	3
14 - 50	220	427.3	Pr > Chi-square	.036
1 -13	225	407.6		

Table 4.24 Relationship between Respondents' number of people they are directly and indirectly responsible for and their assessment of their leaders' leadership behaviour (N = 879)

Respondent's number of people directly and indirectly responsible for.	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
6 - 29	223	457.3	Chi-square	1.398
1 - 5	214	434.7	Df	3
30 +	223	434.4	Pr > Chi-square	.706
0	219	433.2		
Variable: Change-Centred Leader behaviour				
30 +	223	458.7	Chi-square	3.476
6 - 29	223	452.3	Df	3
0	219	425.5	Pr > Chi-square	.324
1 - 5	214	422.5		
Variable: Production-Centred Leader behaviour				
30 +	223	477.3	Chi-square	7.519
6 - 29	223	457.7	Df	3
1 - 5	214	422.5	Pr > Chi-square	.057
0	219	411.3		

Table 4.25 Relationship between Leaders' functional area they are responsible for and their observed leadership behaviour (N = 879)

Leader's functional area	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Corporate Services	26	530.5	**Chi-square**	18.212
Research and Development	57	466.4	**Df**	10
Engineering, Design, Project Management	170	462.9	**Pr > Chi-square**	.052
General Management	224	459.3		
Maintenance Services	55	457.6		
Other	38	439.8		
Financial and Commercial	103	424.4		
Information Technology	27	415.2		
Human Resources	28	407.1		
Marketing	63	386.6		
Production	88	366.3		
Variable: Change-Centred Leader behaviour				
Human Resources	28	522.3	**Chi-square**	18.525
Information Technology	27	499.8	**Df**	10
Corporate Services	26	490.6	**Pr > Chi-square**	.047
General Management	224	480.0		
Other	38	444.0		
Research and Development	57	435.1		
Production	88	424.1		
Engineering, Design, Project Management	170	418.7		
Maintenance Services	55	407.3		
Financial and Commercial	103	397.9		
Marketing	63	393.5		

Table 4.25 Relationship between Leaders' functional area they are responsible for and their observed leadership behaviour (N = 879). Continue.

Leader's functional area	N	Mean Scores	Kruskall Wallis Test	
Variable: Production-Centred Leader behaviour				
Maintenance Services	55	529.0	**Chi-square**	16.870
Financial and Commercial	103	462.8	**Df**	10
Production	88	461.7	**Pr > Chi-square**	.077
Corporate Services	26	455.3		
General Management	224	447.3		
Other	38	438.0		
Marketing	63	435.7		
Information Technology	27	429.0		
Engineering, Design, Project Management	170	412.4		
Research and Development	57	373.5		
Human Resources	28	367.2		

Table 4.26 Relationship between Respondents' functional area and their assessment of their leaders' leadership behaviour (N = 879)

Respondent's functional area	N	Mean Scores	Kruskall Wallis Test	
Variable: Employee-centred leader behaviour				
Human resources	41	482.5	**Chi-square**	8.504
Corporate services	41	476.0	**Df**	10
Maintenance services	82	469.4	**Pr > Chi-square**	.580
Research and Development	69	459.2		
Other	53	446.5		
Engineering, Design, Project Management	210	446.0		
Information Technology	41	428.5		
General Management	40	424.4		
Marketing	83	419.2		
Financial and Commercial	111	406.7		
Production	104	403.5		
Variable: Change-Centred Leader behaviour				
Human resources	41	530.5	**Chi-square**	13.403
Corporate services	41	489.8	**Df**	10
General Management	40	479.3	**Pr > Chi-square**	.202
Other	53	475.1		
Information Technology	41	459.6		
Research and Development	69	440.6		
Production	104	432.3		
Marketing	83	427.8		
Maintenance services	82	420.9		
Engineering, Design, Project Management	210	417.6		
Financial and Commercial	111	406.8		

Table 4.26 Relationship between Respondents' functional area and their assessment of their leaders' leadership behaviour (N = 879). Continue.

Respondent's functional area	N	Mean Scores	Kruskall Wallis Test	
Variable: Production-Centred Leader behaviour				
Maintenance services	82	495.1	**Chi-square**	20.023
Financial and Commercial	111	474.3	**Df**	10
Production	104	471.6	**Pr > Chi-square**	.029
Other	53	470.5		
Corporate services	41	463.6		
Marketing	83	433.7		
Human resources	41	433.3		
Information Technology	41	425.8		
Engineering, Design, Project Management	210	402.8		
Research and Development	69	378.1		
General Management	40	377.9		

The interpretation of Tables 4.11 to 4.26 are as follows: When the Kruskall Wallis test indicates a Pr > Chi-square > 0.05, the scores of the groupings in a particular demographic variable are significantly different for a particular leadership behaviour variable.

From the results in Tables 4.11 to 4.26, only three demographic variables were significant predictors of scores of an employee-centred leader behaviour variable. These demographic variables were the respondent's race group (Table 4.16), the respondent's hierarchical level (Table 4.18), and the leader's functional group (Table 4.25).

Eight demographic variables were significant predictors of scores in the change-centred leader behaviour variable. These demographic variables were the respondent's race group (Table 4.16), the leader's hierarchical level (Table 4.17), the respondent's hierarchical level (Table 4.18), the leader's educational level (Table 4.19), the leader's number of subordinates (Table 4.21), the subordinates number of subordinates (Table 4.22), the leader's number of people they are directly and indirectly responsible for (Table 4.23), and the leader's functional group (Table 4.25).

Six demographic variables were significant predictors of scores on the production-centred leader behaviour variable. These demographic variables were the respondent's age group (Table 4.12), the respondent's gender (Table 4.14), the respondent's level of education (Table 4.20), the respondent's number of subordinates (Table 4.22), the number of people the leader is directly and indirectly responsible for (Table 4.23), and the respondent's functional group (Table 4.26).

5. CHAPTER 5 DISCUSSION

In this final chapter the answers to research questions will be presented and the major findings of the study discussed. Thereafter the implications for management, directions for future research and finally the limitations of the present study will be discussed.

5.1. Research Question 1.

The first research question queries whether in a sample of South African managers, leadership behaviour exist in a three-dimensional form as identified by the CPE model. Thus it implies whether the CPE construct is identifiable in another cultural and environmental setting, that is, in South Africa, with the same leadership behaviour dimensions as found in Scandinavia.

With the application of Exploratory Factor Analysis on the data from the study sample it is confirmed that a similar three-dimensional leadership behaviour model exists in a South African context as was found with the CPE model in Scandinavian countries by Ekvall (1991), Ekvall and Arvonen (1991, 1994), Lindell and Rosenquist (1992) and Skogstad and Einarson (1999). Table 4.1 shows the factor pattern for this study. This illustrates the fact that change and organisational turbulence as experienced by the South African sample also resulted in change-oriented leadership behaviour, as was postulated by the Scandinavian researchers. The change-oriented leadership behavioural dimension is as prominent in South Africa as was found by the other studies.

The comparison of items that loaded on each factor in the three-factor structures for this study and the structures obtained by Ekvall and Arvon's (1991, 1994) are shown in Table 4.2. Item-by-item comparisons between this study's

structure and those of Ekvall and Arvon's (1991, 1994) show that there are significant similarities between the three different structures in terms of item content. Generally, however the order in which the items loaded on each factor differed. This is another indication confirming that the three-dimensional leadership behaviour structure is identifiable in the South African context. The answer to research question one is thus affirmative.

5.1.1. Proposition 1.1

Application of Confirmatory Factor Analysis resulted in promising goodness-of-fit indices of the data to the structural model. Refer to Table 4.6 for the results on Confirmatory Factor Analyses. The goodness-of-fit indices were however not highly satisfactory due to possibly the size of the sample. It is argued that Confirmatory Factor Analysis does not provide satisfactory goodness-of-fit measures when the sample size exceeds 400 to 500 (Hair, Anderson, Tatham & Black, 1995). Hair et al., (1995) state that as the sample size becomes large, as is the case in this study (N = 879) (exceeding the 400 to 500 limit), the Confirmatory Factor Analysis method becomes too sensitive and almost any difference is detected, causing all goodness-of-fit measures to indicate a poor fit. They recommend sample sizes ranging between 100 to 200. In this study the ratio was thus double the recommended sample size for satisfactory goodness-of-fit indices to result. In this study a large sample size was deliberately selected in order to perform sensible cluster analysis.

The matching of structures (Table 4.7) for similarity by means of Confirmatory Factor Analysis (Gorsuch, 1983, p.285) yielded indices indicating high degrees of similarity between the structure obtained in this study and the three-factor structures obtained by Ekvall and Arvonen (1991, 1994).

The values of the coefficients of congruence indicate very high consistency of the factor loading structures found by Ekvall and Arvonen (1991,1994) and the structure accepted in the present study.

These results demonstrate that the measurement scale of Ekvall (1991) has satisfactory portability – at least between the Scandinavian cultural setting and the test sample in South Africa. The results also indicate significant construct validity of the three-dimensional leadership behaviour construct as defined by Ekvall (1991). Further investigations need to be done to demonstrate generalised portability across multiple cultures.

5.1.2. Proposition 1.2

This proposition is concerned with whether similar leadership style groupings exist in this study sample, where each grouping can be identified with a distinctive combination of the three behavioural dimensions, as were found in the Scandinavian studies.

Results reported in Table 4.8 show that ten clusters were identified in line with the clusters Ekvall and Arvonen (1994) and Arvonen (1995) found in their studies and were named accordingly. Differences between the clusters in this study and in Ekvall and Arvonen's (1991) and Arvonen's (1995) studies are that for this study the entrepreneurial and transactional leader profiles could not be established. Instead another profile was identified, (profile 9), named "Charismatic" leaders. These are leaders with high mean scores on the change-oriented and relations-oriented leadership behaviour, but relatively lower mean scores on the structure-oriented leadership behaviour dimension. This profile is thus focusing primarily on change-oriented and relation-oriented leader behaviours, with some, but not complete attention to the task- or production-

oriented behaviours. This description is in line with Conger's (1988) definition of the charismatic leader. According to Conger (1988) charismatic leaders have the ability to promote change, articulate their visions, use advanced skills of communication to portray their visions and empowering people to achieve their visions. The charismatic leaders' ability to engage in task or production-oriented behaviour is not important since the other two behavioural dimensions are strong enough to help him achieve his objectives.

This result indicates that the three-dimensional leadership behaviour scale can be utilised to differentiate between leadership styles of individuals, based on the combination of leadership behaviours along each dimension of the CPE construct.

5.2. Second Research Question.

The second research question is concerned with whether there are relationships between the three-dimensional leadership behaviour styles as identified with the CPE model and EI of leaders, as well as the visioning ability and organisational citizenship behaviour of subordinates.

From the Coefficients of Determination in Table 4.9 it is evident that the leadership behaviour dimensions correlated significantly with emotional intelligence dimensions for the leaders in this study. Employee-centred leadership behaviour was significantly related to all four of the emotional intelligence dimensions for the leader. The highest common variance was for the relation with empathy (56.1%), followed by self-regulation (40,6%), self-motivation (34%) and finally, self-awareness (30,7%).

The change-centred leadership behaviour sub-scale was strongly related to the self-motivation and empathy sub-scales and related to the self-awareness EI

sub-scale for the leader. The common variances were 62.4%, 23.3% and 17.6% respectively.

The production-centred leadership behaviour sub-scale was related to the self-motivation EI sub-scale of the leader (common variance 19.6%).

Similarly, with the application of Step-wise Regression Analysis (Table 4.10), emotional intelligence sub-scales and the total emotional intelligence scale were predicted significantly by means of the employee-oriented leadership behaviour sub-scale as independent variables included in the Step-wise Multiple Regression model. The self-motivation, self-regulation, empathy and self-awareness sub-scales were predicted, 69.7%, 43.2%, 58.9% and 33.9% respectively by the three-dimensional leadership behaviour sub-scales. Total leader emotional intelligence was predicted 60.6% by employee-oriented leadership behaviour.

From these results it appears that the leader's EI behaviour plays a significant role in especially his employee-oriented behaviour. All four dimensions of EI as measured for this sample and perceived by the leaders' subordinates play a significant role in this kind of leader behaviour. It would further appear that a leader's self-motivation, emphatic behaviour and his self-awareness are conceptually significantly related to the leadership change-oriented behaviour as perceived by sub-ordinates. However, only the self-motivation EI behaviour of the leader has a conceptually significant relationship with his perceived task- or production-oriented leader behaviour. Thus the EI dimension of self-motivation has a bearing on all three measured leadership behaviour dimensions.

The three leadership behaviour dimensions showed no conceptually significant relationships or predictions with the visioning ability as well as the organisational citizenship behaviours of the respondents (Table 4.9). This

somewhat unexpected result can be interpreted that in the current sample, leadership behaviour seems not to have significant influence on subordinates' ability to envision the organisation in the future as well as their own futures within the organisation. It would also seem that leaders' behaviour does not influence subordinates' OCB significantly. Another explanation could lie in the way the questionnaire was administered. The respondent assessed his/her leader on leadership behaviour and EI, while he/she did a self-assessment on visioning ability and OCB. Some response bias could have influenced the results.

There was a significant correlation between visioning ability and the loyal-participation dimension of OCB (25% common variance) as measured for this sample (Table 4.9). This is interpreted to mean that respondents with a high degree of loyal-participation in this organisation tend to have a higher ability to envision the organisation's and his own future within that organisation. The opposite may be equally true – that is – someone with a strong ability to envision the organisation's future in a positive light, may also tend to demonstrate a higher degree of loyal-participation within this organisation.

5.3. Third Research Question

The third research question inquires whether the leaders' biographic and organisational variables are related to his/her three-dimensional leadership behaviour style as observed by his/her subordinates.

The results of the N-Par One-way Analysis-of-Variance (Table 4.11 to Table 4.26), showed that only three demographic variables were significantly related to the employee-centred leader behaviour variable. These demographic variables were the respondent's race group (Table 4.16), the respondent's hierarchical level (Table 4.18), and the leader's functional group (Table 4.25).

Numerically white respondents saw their leaders as demonstrating more employee-oriented leadership behaviour, than their Asian, coloured or black peers. Numerically respondents on the 3rd hierarchical level perceived their leaders as demonstrating employee-oriented behaviour to the highest degree relative to the other hierarchical levels, followed by respondents on the 4th hierarchical level. Respondents on the 2nd level perceived their leaders as demonstrating numerically the least employee-oriented behaviour.

The functional group the leader is responsible for seems to possibly play a role in the degree to which it is perceived he or she demonstrates employee-oriented leadership behaviour. Leaders responsible for corporate services, research and development, engineering, design, and project management and general management functions (in that order) seems to demonstrate the most employee-oriented leadership behaviour, while leaders in production, marketing, human resources and information technology (in that order) seems to demonstrate the less employee-oriented leadership behaviour.

Eight demographic variables were significant predictors of variability in the change-oriented leader behaviour variable. These demographic variables were the respondent's race group (Table 4.16), the leader's hierarchical level (Table 4.17), the respondent's hierarchical level (Table 4.18), the leader's educational level (Table 4.19), the leader's number of subordinates (Table 4.21), the subordinates number of subordinates (Table 4.22), the leader's number of people they are directly and indirectly responsible for (Table 4.23), and the leader's functional group (Table 4.25).

White respondents saw their leaders as demonstrating more change-oriented leadership behaviour on a numerical scale, than their Asian, coloured or black peers.

Numerically leaders on the 3rd hierarchical level were perceived as demonstrating change-oriented behaviour to higher degrees than the leaders at other hierarchical levels, followed by respondents on the first hierarchical level. Leaders on the second level were perceived by their respondents as demonstrating numerically the least change-oriented behaviour. Respondents on the sixth level numerically perceived their leaders as demonstrating change-oriented behaviour to the lowest relative degree.

There was an almost linear relationship between the leader's educational level and the respondents' perceptions of their degree of change-oriented leadership behaviour. The higher the level of education of the leader the more the leader was perceived to demonstrate change-oriented behaviour on a numerical scale. The exemption was leaders with doctoral degrees who were rated second to leaders with master's degrees.

There was an almost linear relationship between the leaders' number of direct subordinates and the respondents' perceptions of their degree of change-oriented leadership behaviour. The higher the number of direct subordinates, the higher the leader was perceived to demonstrate change-oriented behaviour on a numerical scale. The exemption was leaders with more than 21 subordinates who were measured second lowest and leaders with 1 to 5 subordinates lowest. Also, there was an almost linear relationship between the respondent's' number of direct subordinates and the respondents' perceptions of their leaders' degree of change-oriented leadership behaviour. The higher the number of respondent's direct subordinates, the higher numerically the respondents perceived their leaders to demonstrate change-oriented behaviour. The exception was respondents with no subordinates, whose perception of the degree of their leaders' change-oriented behaviour was the second lowest of the different groups. Respondents with 1 to 3

subordinates numerically rated their leaders the lowest on change-oriented behaviour.

Also, there was an almost linear relationship between the number of direct and indirect people the leader is responsible for and the respondents' perceptions of their leaders' degree of change-oriented leadership behaviour. The higher the number of direct and indirect people the leader is responsible for, the stronger numerically the respondents perceived their leaders to demonstrate change-oriented behaviour. The exception was leaders who were responsible for 1 to 13 direct and indirect people, who were rated by their respondents as second lowest on change-oriented behaviour. Leaders responsible for 14 to 50 direct and indirect people, were rated the lowest on change-oriented behaviour, by their respondents.

The functional group the leader is responsible for seems to play a significant role in the degree to which he or she is perceived to demonstrate change-oriented leadership behaviour. Leaders responsible for human resources, information technology, corporate services and general management functions (in that order) seems to be perceived to demonstrate more change-oriented leadership behaviour, while leaders in marketing, financial and commercial and maintenance services (in that order) seems to demonstrate the least change-oriented leadership behaviour.

Finally, six demographic variables were significantly related to variance in the production-oriented leader behaviour variable. These demographic variables were the respondent's age group (Table 4.12), the respondent's gender (Table 4.14), the respondent's level of education (Table 4.20), the respondent's number of subordinates (Table 4.22), the number of people the leader is directly and indirectly responsible for (Table 4.23), and the respondent's functional group (Table 4.26).

There was an almost linear relationship between the respondents' age group and the respondents' perceptions of their leader's degree of production-oriented leadership behaviour. The higher the age of the respondent the lower the leader tended to be perceived to demonstrate production-oriented behaviour. The exception was that respondents with ages higher than 55 saw their leaders to be in the middle of the range, and those aged between 31 to 35 rated their leaders lowest in production-centred leader behaviour.

Compared to female participants male respondents perceived their leaders as demonstrating significantly more production-oriented behaviour.

There was an inverse and almost linear relationship between the respondents' educational level and their perceptions of their leader's degree of production-oriented leadership behaviour. The higher the level of education of the respondent the lower the leader tended to be perceived to show production-oriented behaviour on a numerical scale. The exception was respondents with masters degrees who saw their leaders as numerically lower on production oriented behaviour than respondents with doctoral degrees did.

There was an inverse and almost linear relationship between the respondent's number of direct subordinates and their perceptions of their leaders' degree of production-oriented leadership behaviour. The higher the number of direct subordinates, the lower the leader was perceived to present production-oriented behaviour. The exception was respondents with no subordinates who rated their leaders second lowest and respondents with 1 to 3 subordinates who rated their leaders lowest.

Also, there was a linear relationship between the number of direct and indirect people the leader is responsible for and the respondents' perceptions of their leaders' degree of production-oriented leadership behaviour. The higher the

number of direct and indirect people he/she is responsible for, the more the respondents perceived their leaders to demonstrate production-oriented behaviour.

The functional group in which the respondent is active seems to be related to the degree to which the respondent perceives his or her leader exhibiting production-oriented leadership behaviour. Respondents active in maintenance services, financial and commercial, and production functions (in that order) seem to perceive their leaders as demonstrating higher levels of production-oriented leadership behaviour. Respondents in general management, research and development, and engineering, design and project management (in that order) seem to perceive their leaders as demonstrating lower levels of production-oriented leadership behaviour.

The remaining demographic variables did not seem to show significant relations to the three-dimensional leadership behaviours.

5.4. A change-centred leadership style profile

From the answers to these research questions it would therefore seem that the profile of a leader who can exhibit a significant degree of change-oriented behaviour would firstly, have well-developed EI behaviour skills. Secondly, one would find such leaders most probably, in the human resources, information technology, corporate services and general management functions. Thirdly, they would most likely have a large number of direct subordinates and people they are indirectly responsible for. Fourthly, their level of education would probably be at the masters degree level, and, finally, they would probably function at the highest middle to top management levels (Level 3 in this sample).

This leadership profile makes intuitive sense because the types of functions in this profile are typically those that deal with the most degrees of freedom from

an organisational perspective. For example, human resources functions a deal with people with ever changing needs, demands, values and desires. The information technology functions deals with ever changing technology in a fast paced environment rive with competition. The corporate service functions are typically those that render internal consulting services, such as environmental legislation, legal services, and personal relations – mostly executed by professionals in fields that are changing constantly. Finally, general management functions are by nature daily involved in a wide variety of activities and would therefore be fertile ground for cultivating change-oriented leadership behaviour.

The leaders with a strong change-oriented behaviour profile are typically responsible for larger numbers of people and larger numbers of people report to them. This kind of managerial environment with large spans of control would of necessity demand more flexibility and change-oriented behaviour of leaders in such positions. Rigid approaches to work and changing circumstances would render such leaders ineffective. The higher level of education possessed by leaders with this style profile probably makes them more capable to deal with the turbulent kind of environments they are functioning in. These leaders may function to a higher degree in the change-oriented style because they have the skills and confidence to do so due to their higher level of education. Finally, the higher middle management levels (Level 3 in this study) may demonstrate more change-oriented leader behaviour because they are on the boundary between strategy formulation (typically a top echelon activity) and strategy implementation (typically lower echelon activities). This boundary spanning responsibility typically requires a flexible approach to planning, resources, people and changing circumstances and demands between the bottom and the top of the organisation.

Leaders demonstrating a strong change-oriented behaviour style can be found in the clusters named 'creative', 'humanist', 'charismatic' and 'super leaders' for this sample.

5.5. Implications for Management

The results from this study may lead to the following implications for organisational management:

The CPE model has been demonstrated to exist in the South African context and it is possible to group managers and leaders according to their different leadership behaviour profiles into different clusters. The CPE model thus allows the integration of a variety of previous and well-known leadership theories into a concise framework. The implication is that organisations should be cautious to rely on leadership development models based upon only one or two leadership theories such as, for example, contingency theory, visionary leadership, or transformational leadership theory. Leadership behaviour encompasses more than what any single theory addresses. The CPE model could be a valuable tool to evaluate an organisation's leadership behaviour profiles and according to the assessed results a leadership development program could be devised to address the areas where certain leadership behaviours lack.

Secondly, using the CPE model as a leadership development tool may sensitise the 'student' to the importance of change-oriented behaviour as a separate but very important leadership dimension. In today's leadership development courses much attention is given to, for example, employee-centred behaviour skills, visionary leadership and the alignment of the organisation with its strategy, resources, visions, etc. (this is much the same as the 'Initiation of structure' behaviour identified by the Michigan studies). Adding the change-

oriented leadership behaviour dimension in leadership development sessions would focus specific attention on the change dynamics in organisations and the environment and would suggest how the leader is supposed to behave under such circumstances.

The results also pointed out that for the study sample at least, a certain demographic and organisation variable profile could be identified for leaders that demonstrate strong change-centred leadership behaviours. These demographic profiles can be used as a proxy to search for leadership potential suitable for turbulent and competitive organisational environments.

Finally, the very strong correlation between leadership behaviour and leaders' EI behaviour variables point in the direction that organisations should also pay close attention to the development of their leaders' and potential leaders' emotional intelligence behaviours. This may enhance the leaders' leadership behavioural skills and therefore render them more effective as leaders in contemporary and future organisations.

5.6. Directions for future Research

This study could be classified as an 'exploratory research study' because modest work has been done on the CPE construct, as well as the interrelations of leadership with other constructs such as EI, OCB, and visioning ability. The field for future work in this area is therefore wide open.

Future research directions could include, among others;

- Longitudinal studies within the same sample to study the effect of time and change on the behavioural profiles of leaders.

- Replication of this kind of study in other cultural settings, such as the USA and the Far East – to test the generalisability of the CPE construct and to verify the portability of the CPE measurement scale.
- Further work to refine the concept of clustering leadership groups according to leaders' behavioural styles, and relating that to other leadership theories. This notion is in its infancy but could have valuable implications for leadership development if one could statistically prove the validity of such findings. It will also make the CPE model an integrative theory on leadership behaviour – encompassing many of the well-known theories into one concise model.
- The CPE model needs to be studied in relation to various organisational outcomes in other cultural settings as well. Outcomes such as, leader effectiveness, organisational success criteria, cultural change, etc. to determine which leader behaviour profile renders better results under certain circumstances.

5.7. Limitations of this Study

Important limitations of this study are the following:

- The sample was, due to budgetary constraints, drawn from one large group of companies in South Africa and not from a variety of organisations. Clearly the findings can not be generalised across the whole country or to other organisational settings.
- The method used to gather the data was mailed questionnaires that needed to be filled in by respondents. This could clearly lead to mono-method bias in the responses gathered

- The questionnaires also consisted out of four different scales which made the total questionnaire somewhat long. This could have caused some response set in the responses received.
- Due to the fact that a large sample was necessary to perform a good cluster analysis, the results from Confirmatory Factor Analysis are difficult to interpret. Future studies could limit sample sizes for CFA purposes and aggregate samples for enhanced Cluster Analyses.

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University of Pretoria

APPENDIX A

Pretoria 0002 Republic of South Africa Tel (012) 4204111
Faculty of Economic and Management Sciences

STUDY OF MANAGEMENT IN A SOUTH AFRICAN CONTEXT

A research project funded by the National Research Foundation and undertaken from the University of Pretoria, South Africa.

Responsible Researchers

Prof. Adré B Boshoff
Faculty of Economic and Management Sciences
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Dr. René van Wyk
Faculty of Economic and Management Sciences
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Jannie Lourens
PhD Candidate
Faculty of Economic and Management Sciences
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Dear Respondent,

You are a member of a carefully selected group to participate in this research programme. The National Research Foundation is funding this research project on management in organisations in South Africa. The study is being carried out from The University of Pretoria.

Sasol has been selected as an organisation that would participate in this research. Mr Tjeerd Rodenhuis, Sasol's Group Executive - Human Resources, endorses this study.

You are kindly requested to react to the statements in the questionnaire. The statements are related to your specific work environment. Please give us about 30 minutes of your time by completing this questionnaire. There are no right or wrong responses to any of the statements. We are only interested in your opinion. Please ensure that you respond to *every* statement.

If you are interested in receiving feedback with regard to the outcome of the study, please complete the section at the back of the questionnaire.

Your responses are of great importance to the advancement of management knowledge and the South African community in general. We therefore value your co-operation.

The questionnaire should be completed anonymously. Your answers will be treated in strict confidence and will only be used for research purposes. Please try to post the document in the enclosed envelope to us before the 25th of March 2001.

We thank you for your participation and the valuable time, which you are willing to spend on this project.

Prof. A B Boshoff

Dr. R van Wyk

Mr J F Lourens

Appendix B

FOR OFFICE USE ONLY

		FOR OFFICE USE ONLY	
1 Respondent number	_____	V1	1 - 4
2 Card number	_____	V2	5
3 Repeat number	_____	V3	6

Instructions:

Think about your immediate superior (the person to whom you directly report) and react honestly to the following statements. Please respond to the statements by using this scale:

Seldom or never	=	1
Sometimes	=	2
Often	=	3
Most of the time	=	4

Please draw an X in the appropriate block

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My Superior:

1.	Is friendly	1	2	3	4	V4		7
2.	Listens to ideas and suggestions.	1	2	3	4	V5		8
3.	Creates order	1	2	3	4	V6		9
4.	Relies on his/her subordinates	1	2	3	4	V7		10
5.	Is willing to take risks in decisions	1	2	3	4	V8		11
6.	Is very clear about who is responsible for what	1	2	3	4	V9		12
7.	Has an open and honest style	1	2	3	4	V10		13
8.	Encourages thinking along new lines	1	2	3	4	V11		14
9.	Is consistent	1	2	3	4	V12		15
10.	Criticizes in a constructive way	1	2	3	4	V13		16
11.	Likes to discuss new ideas	1	2	3	4	V14		17

12.	Makes a point of following rules and principles	1	2	3	4	V15		18
13.	Creates trust in other people	1	2	3	4	V16		19
14.	Gives thoughts and plans about the future	1	2	3	4	V17		20
15.	Gives information about the results of the unit	1	2	3	4	V18		21
16.	Shows appreciation for good work	1	2	3	4	V19		22
17.	Pushes for growth	1	2	3	4	V20		23
18.	Sets clear goals	1	2	3	4	V21		24
19.	Is considerate	1	2	3	4	V22		25
20.	Initiates new projects	1	2	3	4	V23		26
21.	Is very exact about plans being followed	1	2	3	4	V24		27
22.	Stands up for his/her subordinates	1	2	3	4	V25		28
23.	Experiments with new ways of doing things	1	2	3	4	V26		29
24.	Is controlling in his/her supervision of work	1	2	3	4	V27		30
25.	Creates an atmosphere free of conflict	1	2	3	4	V28		31
26.	Sees possibilities rather than problems	1	2	3	4	V29		32
27.	Defines and explains work requirements clearly	1	2	3	4	V30		33
28.	Is just in treating subordinates	1	2	3	4	V31		34
29.	Makes quick decisions when necessary	1	2	3	4	V32		35
30.	Plans carefully	1	2	3	4	V33		36
31.	Allows his/her subordinates to decide	1	2	3	4	V34		37

32.	Is flexible and ready to rethink his/her point of view	1	2	3	4	V35	38
33.	Gives clear instructions	1	2	3	4	V36	39
34.	Shows regard for subordinates as individuals	1	2	3	4	V37	40
35.	Offers ideas about new and different ways of doing things	1	2	3	4	V38	41
36.	Analysis and thinks through issues before deciding	1	2	3	4	V39	42

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		FOR OFFICE USE ONLY	
1 Respondent number	_____	V40	1 - 4
2 Card number	_____	V41	5
3 Repeat number	_____	V43	6

Instructions:

Think about your immediate superior (the person to whom you directly report) and react honestly to the following statements. Please respond to the statements by using this scale:

I disagree completely	=	1
I disagree	=	2
I disagree somewhat	=	3
I do not agree or disagree	=	4
I agree somewhat	=	5
I agree	=	6
I agree completely	=	7

My superior:

Please draw an X in the appropriate block

1.	Is well aware of his or her impulses	1	2	3	4	5	6	7	V44		7
2.	Is well aware of his or her moods.	1	2	3	4	5	6	7	V45		8
3.	Is well aware of the non-verbal messages he or she sends to others	1	2	3	4	5	6	7	V46		9
4.	Is well aware of how his or her gut feelings influence decisions	1	2	3	4	5	6	7	V47		10
5.	Is well aware of which emotions he or she is experiencing and why	1	2	3	4	5	6	7	V48		11

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6.	Is well aware of his or her self-worth and capabilities	1	2	3	4	5	6	7	**V49**	12
7.	Is well aware of his or her strengths and limitations	1	2	3	4	5	6	7	**V50**	13
8.	Is well aware of his or her feelings and their effects on others	1	2	3	4	5	6	7	**V51**	14
9.	Controls his or her impulsive feelings well	1	2	3	4	5	6	7	**V52**	15
10.	Controls his or her distressing emotions well	1	2	3	4	5	6	7	**V53**	16
11.	Manages his or her stress well	1	2	3	4	5	6	7	**V54**	17
12.	Remains calm in potentially volatile situations	1	2	3	4	5	6	7	**V55**	18
13.	Takes responsibility for his or her performance	1	2	3	4	5	6	7	**V56**	19
14.	Is self-disciplined and does the right thing even when it is unpopular	1	2	3	4	5	6	7	**V57**	20
15.	Maintains composure irrespective of his or her emotions	1	2	3	4	5	6	7	**V58**	21
16.	Keeps his or her disruptive impulses in check	1	2	3	4	5	6	7	**V59**	22
17.	Takes the initiative for change	1	2	3	4	5	6	7	**V60**	23
18.	Builds informal networks	1	2	3	4	5	6	7	**V61**	24
19.	Seeks fresh ideas from many sources	1	2	3	4	5	6	7	**V62**	25
20.	Generates new ideas	1	2	3	4	5	6	7	**V63**	26
21.	Accepts rapid change to meet the needs of the organisation	1	2	3	4	5	6	7	**V64**	27
22.	Finds new ways to improve performance	1	2	3	4	5	6	7	**V65**	28
23.	Generates innovative solutions to problems	1	2	3	4	5	6	7	**V66**	29
24.	Stays focused on goals despite setbacks	1	2	3	4	5	6	7	**V67**	30

25.	Understands the links between employees' emotions and what they do	1	2	3	4	5	6	7	**V68**	31
26.	Understands why people feel the way they do	1	2	3	4	5	6	7	**V69**	32
27.	Is sensitive to emotional cues from others	1	2	3	4	5	6	7	**V70**	33
28.	Provides useful feedback	1	2	3	4	5	6	7	**V71**	34
29.	Changes peoples' behaviour through persuasion	1	2	3	4	5	6	7	**V72**	35
30.	Understands the feelings transmitted through **verbal** messages	1	2	3	4	5	6	7	**V73**	36
31.	Understands the feelings transmitted through **non-verbal** messages	1	2	3	4	5	6	7	**V74**	37
32.	Helps others feel better when they are down	1	2	3	4	5	6	7	**V75**	38
33.	Does not allow own negative feelings to inhibit collaboration	1	2	3	4	5	6	7	**V76**	39
34.	Does not allow negative feelings of others to inhibit collaboration	1	2	3	4	5	6	7	**V77**	40
35.	Sets aside emotions in order to meet organisational goals	1	2	3	4	5	6	7	**V78**	41
36.	Handles emotional conflicts with tact and diplomacy	1	2	3	4	5	6	7	**V79**	42
37.	Manages task-related conflicts effectively	1	2	3	4	5	6	7	**V80**	43
38.	Inspires and guides employees to attain group/organisational goals	1	2	3	4	5	6	7	**V81**	44
39.	Recognises the political realities of the organisation	1	2	3	4	5	6	7	**V82**	45
40.	Confronts problems without demeaning those who work with him/her	1	2	3	4	5	6	7	**V83**	46

FOR OFFICE USE ONLY

		FOR OFFICE USE ONLY	
1 Respondent number	_____	V84	1 - 4
2 Card number	_____	V85	5
3 Repeat number	_____	V86	6

Instructions:

In your mind, create an image of your organisation in the future. Take a few minutes to think about what you would like to see it become. Read each statement below carefully and decide the degree to which it is true for you. Please respond by using this scale:

I strongly disagree	=	**1**
I disagree	=	**2**
I neither disagree nor agree	=	**3**
I agree	=	**4**
I strongly agree	=	**5**

Please draw an X in the appropriate block

							FOR OFFICE USE ONLY		
1.	It is easy to imagine myself and how I will be leading my organisation in the future	1	2	3	4	5	V87		7
2.	It is easy to think positively about my leadership skills in the future	1	2	3	4	5	V88		8
3.	It is easy to imagine my organisation and what it will be like in the future	1	2	3	4	5	V89		9
4.	It is easy to think positively about this organisation in the future	1	2	3	4	5	V90		10
5.	I can clearly imagine how large this organisation will be	1	2	3	4	5	V91		11
6.	I can clearly imagine the type of organisation it will be	1	2	3	4	5	V92		12
7.	I can clearly imagine the type of people who will be involved in this organisation	1	2	3	4	5	V93		13
8.	I can clearly imagine the physical environment of this organisation in the future	1	2	3	4	5	V94		14
9.	How this organisation will look like is clear in my mind	1	2	3	4	5	V95		15

10.	I frequently imagine this organisation in the future	1	2	3	4	5	V96		16
11.	I can clearly imagine my role in this organisation in the future	1	2	3	4	5	V97		17
12.	It is clear to me whether this organisation will be successful in the future	1	2	3	4	5	V98		18

Instructions:

The following questions refer to <u>your</u> work and organisation, i.e. how you regard your present job and organisation. Please describe <u>your</u> behaviour by responding to the statements in terms of the following scale:

I disagree completely	=	1
I disagree	=	2
I disagree somewhat	=	3
I do not agree or disagree	=	4
I agree somewhat	=	5
I agree	=	6
I agree completely	=	7

Regarding <u>my</u> work situation, I

Please draw an X in the appropriate block

									FOR OFFICE USE ONLY		
1.	Only attend work-related meetings if required by my job	1	2	3	4	5	6	7	V99		19
2.	Share ideas for new projects or improvements widely	1	2	3	4	5	6	7	V100		20
3.	Stay informed about products or services and tell others	1	2	3	4	5	6	7	V101		21
4.	Work so that my personal appearance is attractive and appropriate	1	2	3	4	5	6	7	V102		22
5.	Frequently make creative suggestions to my co-workers	1	2	3	4	5	6	7	V103		23
6.	Use professional judgement to assess right/wrong for the organisation	1	2	3	4	5	6	7	V104		24
7.	Encourage management to keep knowledge and skills up to date	1	2	3	4	5	6	7	V105		25
8.	Help co-workers think for themselves	1	2	3	4	5	6	7	V106		26
9.	Stay well-informed where opinions might benefit the organisation	1	2	3	4	5	6	7	V107		27
10.	Volunteer for overtime work when needed	1	2	3	4	5	6	7	V108		28

11.	Do not go out of my way to defend the organisation against outside threats	1	2	3	4	5	6	7	V109	29
12.	Do not defend the organisation when employees criticise it	1	2	3	4	5	6	7	V110	30
13.	Would urge co-workers to invest money in the organisation	1	2	3	4	5	6	7	V111	31
14.	Do not meet all deadlines set by the organisation	1	2	3	4	5	6	7	V112	32
15.	Am not involved in outside groups that would benefit the organisation	1	2	3	4	5	6	7	V113	33
16.	Do not push superiors to perform at higher standards	1	2	3	4	5	6	7	V114	34
17.	Do not pursue additional training to improve my performance	1	2	3	4	5	6	7	V115	35
18.	Do not work beyond what is expected of me	1	2	3	4	5	6	7	V116	36
19.	Represent the organisation favourably to outsiders	1	2	3	4	5	6	7	V117	37
20.	Actively promote the organisation's products and services	1	2	3	4	5	6	7	V118	38
21.	Would accept a job at competing organisations for more money	1	2	3	4	5	6	7	V119	39
22.	Produce as much as I am capable of at all times	1	2	3	4	5	6	7	V120	40
23.	Always come to work on time	1	2	3	4	5	6	7	V121	41
24.	Regardless of circumstances, produce the highest quality work	1	2	3	4	5	6	7	V122	42
25.	Am mentally alert and ready to work when arriving at work	1	2	3	4	5	6	7	V123	43
26.	Follow work rules and instructions with extreme care	1	2	3	4	5	6	7	V124	44
27.	Keep work areas clean and neat	1	2	3	4	5	6	7	V125	45
28.	Do not tell outsiders that this is a good place to work for	1	2	3	4	5	6	7	V126	46
29.	Rarely waste time at work	1	2	3	4	5	6	7	V127	47

30.	Sometimes waste organisational resources	1	2	3	4	5	6	7	V128	48
31.	Sometimes miss work for no good reason	1	2	3	4	5	6	7	V129	49
32.	Avoid extra duties and responsibilities at work	1	2	3	4	5	6	7	V130	50
33.	Have difficulty co-operating with others on projects	1	2	3	4	5	6	7	V131	51
34.	Encourage others to speak up at meetings	1	2	3	4	5	6	7	V132	52

BIOGRAPHIC INFORMATION - SUPERIOR

Please provide the following information about <u>your immediate superior.</u> Draw an X in the appropriate block

FOR OFFICE USE ONLY

1 Superior's age (years) — V133 — 53-54

2 Superior's gender

Male	1	V134	55
Female	2		

3 Superior's race (for statistical purposes only)

Black	1	V135	56
White	2		
Asian	3		
Coloured	4		
Other	5		

4 Superior's organisational level

Level 1	1	V136	57
Level 2	2		
Level 3	3		
Level 4	4		
Level 5	5		

5 Superior's qualifications (mark highest level attained only) — V137 — 58

1	Secondary school	1
2	Std 10 or equivalent	2
3	Post-school certificate / diploma	3
4	Bachelor's degree or equivalent	4
5	Honours degree or equivalent	5
6	Masters degree or equivalent	6
7	Doctoral degree or equivalent	7

6 How many people directly report to him/her? — V138 — 59

7 For how many people in the organisation is he/she responsible? — V139 — 60

8 Superior's current functional area V140 [ ] 61-62

1. General Management	1.
2. Human Resources	2.
3. Production	3.
4. Financial & Commercial	4.
5. Marketing	5.
6. Corporate Services	6.
7. Engineering, Design or Project Management	7.
8. Information Technology	8.
9. Maintenance Services	9.
10. Research & Development	10.
11. Other – Please Specify	11.

BIOGRAPHIC INFORMATION – SELF

Please provide the following information about yourself. FOR OFFICE USE ONLY

1 Your age (years) [ ] V141 [ ] 63

2 Your gender

Male	1
Female	2

V142 [ ] 64

3 Your race (for statistical purposes only)

Black	1.
White	2.
Asian	3.
Coloured	4.
Other	5.

V143 [ ] 65

4 Your organisational level

Level 2	1.
Level 3	2.
Level 4	3.
Level 5	4.
Level 6	5.

V144 [ ] 66

5 Your qualifications (mark highest level attained only) V145 [ ] 67

1 Secondary school	1
2 Std 10 or equivalent	2
3 Post-school certificate / diploma	3
4 Bachelor's degree or equivalent	4
5 Honours degree or equivalent	5
6 Masters degree or equivalent	6
7 Doctoral degree or equivalent	7

6 How many people directly report to you? [ ] V146 [ ] 68

7 For how many people in the organisation are you responsible? [ ] V147 [ ] 69

3 Your current functional area **V148** [ ] **70-71**

1. General Management	1.
2. Human Resources	2.
3. Production	3.
4. Financial & Commercial	4.
5. Marketing	5.
6. Corporate Services	6.
7. Engineering, Design or Project Management	7.
8. Information Technology	8.
9. Maintenance Services	9.
10 Research & Development	10.
11 Other – Please Specify	11.

✂----------✂

If you are interested in receiving feedback with regard to the outcome of the study, please complete the section below.

Name :

_____

Adress:

_____

E-Mail Address:

_____

You may, if you don't mind, leave this slip attached to your questionnaire.

If you prefer to separate the slip from the questionnaire you can mail it to:

Prof. A B Boshoff
Study of Management in a South African context
Faculty of Economic and Management Sciences
P/a Central Records
Sasol Ltd.
Rosebank

Thank your for your time and willingness to complete this survey.

APPENDIX C

University of Pretoria

Pretoria 0002 Republic of South Africa Tel (012) 4204111
Faculty of Economic and Management Sciences

STUDY OF MANAGEMENT IN A SOUTH AFRICAN CONTEXT

A research project funded by the National Research Foundation and undertaken from The University of Pretoria, South Africa.

Prof. Adré B Boshoff
Faculty of Economic and Management Sciences
University of Pretoria

Dr. René van Wyk
Faculty of Economic and Management Sciences
University of Pretoria

Jannie Lourens
PhD Candidate
Faculty of Economic and Management Sciences
University of Pretoria

Dear Participant,

We recently sent a letter and a questionnaire to you. In the letter we explained that you had been selected to participate in a research project within Sasol. If you have already returned your response, please ignore this letter. Thank you for your participation.

If for some reason you have not yet returned your completed questionnaire, attached you will find a copy.

Please complete the questionnaire urgently and return it to us in the enclosed envelope before the 4th of April 2001. It should take about 20 minutes to complete.

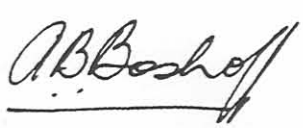
The National Research Foundation is funding this research project on management in organisations in South Africa. The study is being carried out from The University of Pretoria.

Sasol has been selected as the organisation that would participate in this research. Mr Tjeerd Rodenhuis, Sasol's Group Executive - Human Resources, endorses this study.

Your responses are of great importance to the advancement of management knowledge and the South African community in general. We therefore value your co-operation.

The questionnaire should be completed anonymously. Please ensure that you respond to every statement. Your answers will be treated in strict confidence and will only be used for research purposes.

We thank you for your participation and the valuable time, which you are willing to spend on this project.



Prof. A B Boshoff

Dr. R van Wyk

Mr J F Lourens