AS INDICATOR OF EFFECTIVE LEADERS. THE VALIDITY OF THE WHEEL ORGANISATIONAL CHANGE.

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STATEMENT

I, the undersigned, hereby declare that the work contained in this assignment is my own
original work, and that I have not previously in its entirety or in part submitted it at any
university for a degree.

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ABSTRACT

On the basis of a literature review regarding effective leadership, coping with change and the assessment of effective leadership and coping, this study investigated the use of The Wheel, a free-format, projective technique, which lends itself to a qualitative and quantitative analysis. A group of (N=75) managers, within a large South African engineering organisation, were assessed during organisational change. Human Resource practitioners and supervisors evaluated participants' leadership effectiveness by using a six-point Lickert scale. Overall performance scores were calculated based on a gap analysis between perceived performance and required performance. High, Medium and Low performance groups were identified and compared in terms of The Wheel results. On a quantitative level significant differences were obtained with regards to Overall performance scores and the Number of Segments completed by participants. Furthermore, some of The Wheel constructs correlated with individual performance rating items and also appears to reflect the impact of organisational change on participants' Attitudes, Discrimination and Sense of Control towards key words "My Work". On a qualitative level, the contents of The Wheel profiles indicated themes that may be an indication of different approaches and / or problems experienced respectively by High and Low performance groups during organisational change. The Wheel may thus have predictive validity for assessing leadership effectiveness during organisational change, but due to limitations of this explorative study, further research is recommended.

OPSOMMING

Op grond van 'n literatuurstudie van effektiewe leierskap, hantering van verandering en die meting van effektiewe leierskap en probleemhantering, word die gebruik van The Wheel, 'n projeksietegniek wat kwalitatiewe en kwantitatiewe interpretasie behels, ondersoek. Vervolgens is 'n groep (N=75) bestuurders, vanuit 'n groot Suid-Afrikaanse ingenieurs organisasie, tydens organisatoriese verandering en herstrukturering Prestasie beoordelings vir elk van die deelnemers is deur menslike geëvalueer. hulpbronpraktisyns en supervisors gedoen op grond van 'n ses-punt Lickert skaal. Algehele prestasietellings is vir elke deelnemer bereken op grond van 'n gapingsanalise tussen waargenome prestasie en vereiste prestasie. Hoë, Medium en Lae prestasiegroepe is geïdentifiseer en vergelyk in terme van die The Wheel resultate. Op 'n kwantitatiewe vlak was daar betekenisvolle verskille tussen verskillende prestasiegroepe en die Getal Segmente ingevul deur deelnemers. Sommige van die The Wheel konstrukte het ook betekenisvolle korrelasies getoon met van die prestasiebeoordelingsitems. Die The Wheel resultate het ook die situasionele impak van organisatoriese verandering en herstrukturering gereflekteer in terme van deelnemers se Houdings-, Diskriminasie- en Kontroletellings behaal vir sleutelwoorde "My Werk". Op 'n kwalitatiewe vlak dui die inhoud van die The Wheel profiele daarop dat Hoë en Lae prestasiegroepe onderskeidelik verskillende temas meld tydens die vrye assosiasie oefening. Die The Wheel mag belofte inhou vir die meting van effektiewe leierskap, maar as gevolg van beperkings in hierdie eksploratiewe studie, word verdere navorsing aanbeveel.

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1 INTRODUCTION, MOTIVATION AND AIMS OF THE RESEARCH

1.1 Introduction

Modern day organisations are characterised by rapid change and transformation. However, it is evident that not all leaders are able to adapt to, and function effectively within a context of such change. In the light of the role of leadership in successful implementation of such change, and the impact of changing environments on leaders' functioning, it is crucial to identify characteristics associated with effective leadership behaviour in changing environments.

Within the SA context organisations are increasingly recognising and responding to the need for organisational change and transformation. Some authors are even of the opinion that the future existence of South African organisations may depend on their ability to adapt to continuous change, through becoming learning organisations that are able to foster new ways of thinking, generating new visions of the future and continuous learning opportunities (Gxwala, 1995; Pretorius, 1996; Van Rensburg & Crous, 2000).

1.2 Motivation for research

Leadership has been studied from numerous disciplinary perspectives, theoretical models and methodologies. However, the results of various studies of leadership behaviour show contradictions, inconclusive results and difficulties conceptualising this phenomena. Several researchers therefore accentuate the need for further research in order to achieve a more integrated understanding of the complexities involved in this age old, yet contemporary issue.

Considering the call for effective leadership amidst changing work environments, organisations need further insight in what constitutes effective leadership behaviour, as well as effective coping with change.

This new duality further necessitates the identification of assessment procedures to measure and predict individual characteristics associated with both effective leadership and coping. Due to limitations often associated with fixed-format assessment instruments, this study therefore investigates the use of both quantitative and qualitative measures to examine leadership effectiveness and coping during organisational change.

Information derived from this South African study may assist in enabling organisations to identify effective leadership behaviour to manage and cope with change. Qualitative and quantitative data may further indicate typical difficulties experienced by leaders

during organisational change and thus identify development interventions. The results may also be valuable in identifying required leadership behaviour and individual characteristics to enhance person-job match during selection processes.

1.3 Broad aims of research

The purpose of this study is to determine individual characteristics associated with effective leadership and coping behaviour amidst organisational change, as indicated by the perceived performance and self-reported perceptions of managers during a change process. The results derived from this study will also provide information regarding the validity of the use of *The Wheel* as indicator of effective leadership behaviour during organisational change and transformation. This is a free-format assessment instrument, which measures Attitude, Discrimination, Emotional Involvement, Sense of Control, Affective Focus and Coping (Reinfield, 1995).

On a qualitative level, the self-reported content of *The Wheel* profiles will be examined to identify themes or common factors, which may be indicative of more or less effective leadership behaviour and coping strategies during organisational change and transformation.

1.4 Outline of the area of research

This research is a qualitative and quantitative study of leadership behaviour and effectiveness of managers within a multi-sector South African Engineering organisation during a period of transformation and change.

2 THEORETICAL PRINCIPLES

This research is informed by Ben Shalit's Sequential Adjustment Model (SAM), which describes the process leading up to our final appraisal of a given situation. Shalit adapted Lazarus's model on subjective observation and coping to accommodate the construct framework of respondents in their appraisal of a given situation (Reinfield, 1995). The premise underlying subjective observation is that individuals perceive and experience situations differently as a result of differences in exposure and varying preferences. Another theoretical model underscribing this research is G.A Kelly's Personal Construct Theory which stresses that a person's responses are made in terms of the situation as he / she conceptualises it (Maddi, 1989).

Existing literature suggest that leadership is a multi-dimensional concept which involves a broad spectrum of characteristics, traits and behaviour patterns. A single theoretical framework has therefore not been selected and a broader approach is proposed.

This South African study is furthermore conducted within the context of organisational change and transformation, in order to examine the validity of *The Wheel*, based on Shalit's SAM, as indicator of effective and / or ineffective leadership behaviour and coping during such change.

3 LITERATURE STUDY

3.1 The need for organisational change

According to Phatak, the management of change will be one of the key global themes of the twenty-first-century (quoted in Grean & Hui, 1999). Furthermore, Rousseau and Tijoriwala (1999) indicates that global competition, cost pressures, innovation in information technology, and rising consumer expectations necessitate organisational change and put pressure on employers to effectively manage these changes. Future leaders are therefore faced with continuously increasing competitive pressure, which force them to seek innovative strategies, upgrade product quality and react faster to secure markets (Conger, 1993). In order to realise a competitive advantage, organisations seek flexibility, enabling them to quickly adapt to environmental changes, explore new ideas or processes and reduce fixed costs (Leana & Barrie, 2000).

Organisational flexibility requires adaptability and flexibility from leaders and managers, not only to keep up with change, but to anticipate the need for change. For continual improvement, organisations must be willing to implement ongoing changes in procedures and systems (Waldman, 1993).

Although some researchers question the importance of leadership, Roodt (2001) found competent leadership to be one of the best predictors of business success and therefore perceives the need to establish credible and effective leadership. Conger, (1993) also indicates that leadership becomes critically important in times of transition and chaos, especially to provide direction for change. However, rather than doing more of the same, new approaches need to be identified as older models of leadership will no longer be appropriate to develop and train leaders for the future. This requires a thorough understanding of what future leadership demands will be.

Within South Africa, Gxwala (1995) maintains that transitional and evolutionary changes at different levels also necessitates some fundamental changes in traditional attitudes, as well as the elimination of bureaucratic and self-serving systems in the private and public sectors. He postulates that the South African corporate culture is steeped in authoritarian top-down management paradigms, which fails to encourage employees to display innovation and initiative.

It is therefore important for organisations to identify and develop leaders, who are able to manage and drive organisational transformation in order to absorb the ever increasing and continuously changing demands of the work environment and society. Some writers estimate that as many as 80% of failed restructuring attempts could be linked to ineffective leadership (Van Rensburg & Crous, 2000). Yet, Fulkerson (1999) indicates that despite the vast amount of leadership research and literature available, it is safe to assume that the consistent and accurate prediction of leadership success remains elusive.

3.2 Leadership literature

Experts in the field of leadership have concluded that the search for key leader personality traits results in a broad spectrum of characteristics, which fails to produce consistent results across studies (Anderson & Schneier, 1978). Results from studies based on diverse leadership models indicate different approaches, treating specific leadership styles such as transformational and charismatic leadership, as complex constellations of different behaviours and dimensions (Conger & Kanungo quoted in Kirkpatrick & Locke, 1996). These two leadership approaches have also been positively linked to followers' performance, attitudes and perceptions. However, according to Kirkpatrick & Locke (1996), the causal relationship between charismatic and transformational leadership has not been unequivocally demonstrated. Furthermore, most studies have not isolated the effects of charismatic and transformational leadership components or their combinations. Intervening or causal links between these leadership styles and job performance have also not been investigated.

An experimental study by Avolio and Jung (2000), focusing on the impact of different leadership styles, found that transformational leadership had a strong positive effect on performance quality, whilst transactional leadership tends to increase performance quantity. Avolio and Bass (quoted in Avolio, Bass & Jung, 1999) further indicate that although transformational and transactional leadership is generally regarded as opposites of the same continuum, a positive correlation exists between these styles and effective leaders typically display characteristics associated with both transformational and transactional leadership. Nevertheless, Anderson and Schneier, (1978) point out that few studies examine different behaviour patterns that exist between leaders of different personality types, or of the level of performance achieved by different personality types in leadership situations.

3.3 Effective leadership in changing environments

In terms of defining effective leadership, this study adopts a general definition, which accommodates diverse viewpoints and approaches, rather than examining leadership from one theoretical framework. House et al. (1999), together with 54 researchers from 38 countries, generated such a universal definition during the GLOBE project. They defined organisational leadership as 'the ability of an individual to influence, motivate, and enable others to contribute towards the effectiveness and success of the organisation of which they are members (p184).

Nevertheless, to identify, select and develop more effective leaders it is important to identify specific individual qualities associated with leadership effectiveness in general, as well as effective leadership amidst changing environments. In this regard, several themes emerge from the literature.

Influence features as a core concept in an endless variety of definitions. Leaders influence others to help accomplish group or organisational objectives. Grean and Hui (1999) define leadership in terms of incremental influence, that is, the influence leaders have on followers above and beyond that of their positional power. Kirkpatrick and Locke (1991) emphasised that effective leaders have a strong need to lead, to take responsibility and to influence others, rather than taking a subordinate role. Leaders who are perceived to exercise more influence should therefore be perceived as more effective leaders than those who appear to be less influential.

Management Research Group (1995) conducted a study to demonstrate the link between specific leadership behaviours and leadership effectiveness. This study found that managers, who were perceived as more effective leaders by superiors, rated themselves differently from less effective leaders on a leadership behaviour questionnaire. They obtained higher scores for the innovative and strategic vision scales than those perceived as less effective. According to Briggs (1996) a change leader prospers within a context of change and is able to tolerate ambiguity well. They are flexible and creative and willing to modify their plans. Against a backdrop of constant change, increasing complexity, greater diversity and more intense competition, leaders who foster versatility and continuous growth in their people are more likely to sustain successful and resilient organisations (Hicks & Peterson, 1999). Morgan (quoted in Gxwala, 1995) proposes that skilful managers of change should display openness to new ideas and encourage others to seek a variety of possibilities. In contrast less skilful managers are more likely to interpret everything from a fixed

standpoint and they become rigid, hard-edged, forceful autocrats who compel others to buy into their particular views of things (Gxwala, 1995). April and MacDonald (1998) found that instead of seeking stability, effective managers actively seek new information. Leaders capable of creating flexible work environments, which encourage adaptability and innovation, should therefore correlate positively with more effective leadership within changing environments.

In order to motivate and inspire their followers, leaders need to display energy, inner drive, involvement and commitment. These qualities not only appear to be linked to more effective leadership, but some writers indicate that it may also be related to improved stress management. Naudé (2001) found that internal drive was identified as one of the most important common qualities shared by leaders of companies, which showed dramatic performance turn around between 1965 and 1999. He postulates that successful leaders must possess energy and commitment to the organisation. Avolio (1996) also emphasises that being perceived as energetic, is one of the personality characteristics most consistently associated with effective leadership. Lawrence and Kleiner (1987), refers to the quality of positive self-motivation, an inner drive that puts optimism into action. In this regard, Antonovsky (quoted in Kobasa, 1979) found that committed persons have a belief system that minimizes the perceived threat of any given stressful life event. The encounter with a stressful event is mitigated by a sense of purpose that prevents giving up on one's social context and oneself in times of great pressure. Committed persons also feel an involvement with others that serve as a generalised resistance resource against the impact of stress.

Leadership furthermore implies managing the efforts of others and working effectively within a group context. Teamwork and interpersonal skills was ranked amongst the most important job skills requirements, listed in 1990 by the Fortune 500 Companies of America for new employees (Cassel, 1999). Conger (1993) emphasises that leaders should be interpersonally competent and sensitive to issues of diversity associated with changes in backgrounds and needs of employees. These forces also encourage leaders to be more supportive and less directive. Yet, the overall leadership role of stability and control remain, to provide direction and reassurance as something stable amidst changing environments. Leaders therefore need to find the balance between setting direction, whilst participating, listening and cooperating. They need to be committed to carry out their visions, whilst being flexible, responsive and able to change direction when required (Avolio & Jung, 2000). Although clarifying roles and setting

structure also feature as important leadership behaviour, Yukl (1989) found that several studies indicate a positive relationship between planning and managerial effectiveness, provided that planning is informal and flexible, rather than rigid and inflexible.

Increased organisational effectiveness and success implies goal achievement. Change leaders select their goals carefully and are persistent and focused toward achieving these goals (Briggs 1996). Bass (quoted in Howell & Avolio, 1993) found that leaders described as transformational focus their efforts on longer term goals by placing value and emphasis on developing a vision, inspiring followers to pursue the vision and changing or aligning systems to accommodate their vision. An analysis of relevant theoretical literature by Kirkpatrick & Locke (1996) to identify and isolate key features of charismatic and transformational leadership further indicates the importance of communicating the vision, implementing the vision and demonstrating a charismatic communication style as core components common across the theories.

According to Lord, de Vader and Alliger (1986) there has been a decline in leadership research that evaluates the link between personality traits, leadership perceptions and behaviours. However, they postulated that personality traits play a greater role in leadership behaviour than popular literature suggests. Anderson and Schneier (1978) examined the distinctive characteristics and outcomes attributed to leaders with internal and external locus of control. The study investigating the relationships between internalexternal control, leader behaviour and performance outcomes from leader-subordinate situations, confirmed previous findings that personality differences play an important role in determining differential outcomes in leadership situations. Subjects possessing what they termed an "internal personality type", or displaying internal locus of control, were found to be more likely to emerge as leaders of their groups, they achieved significantly superior performance as individuals, as well as for their work groups. The study also indicated certain behaviours as more characteristic of internal leadership situations than of externals, suggesting a task orientation, which could account for performance differences. Investigating the role of locus of control in transformational leadership and the impact it has on performance, Howell and Avolio (1993) found that internal locus of control was positively related to leaders being described as transformational. Such leaders exhibit greater confidence in their ability to influence the environment than externally oriented manager. They are also found to be more capable in dealing with stressful situations, place greater reliance on open and supportive means of influence, pursue riskier and more innovative company strategies, and

generate higher group and company performance. This notion was supported by the findings of Scheck and Kinicki (2000), indicating that individuals with stronger perceived control are less likely to appraise an organisational acquisition transition as stressful than those with lower levels of perceived control.

3.4 Coping with change

One of the central reactions to organisational change involves the extent to which individual managers cope with the uncertainties that radical change introduce into their work lives. Folkman, Lazarus, Gruen, and De Longis (1986) defines coping as 'the person's cognitive and behavioural efforts to manage (reduce, minimize, master, or tolerate) the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person's resources (p572)'. More simply expressed: Coping is developing an attitude and a way to deal with events.

Coping with any stressful event appears to be related to a person's appraisals of the situation, sense of control, general attitude and consequent reactions. Coping with change furthermore presupposes flexibility and adaptability to cope with unknown or unfamiliar situations. Moss (quoted in Kobasa, 1979) indicates that persons who are positive about change are good at responding to the unexpected. He ascribes this to a life orientation encouraging such individuals to seek interesting experiences and motivating them to explore their environments. When experiencing problems, they therefore know where to turn for resources to aid them in coping with stress. More specifically, Lau and Woodman (1995) argued that reactions to organisational change are affected by the individual's change schemata, which they defined as mental maps representing knowledge structures of change attributes, and relationships among different change events.

Lazarus, generally regarded as a pioneer in the field of stress and coping research, proposed that the relational meaning that an individual constructs from the person-environment relationship is the conceptual bottom-line of his theory (Lazarus, 2000). That relationship is the result of appraisals of confluence of the social and physical environment and personal goals, belief about self and world, and resources. Defining coping, Lazarus comes to the conclusion that coping is highly contextual, and although stable coping styles exist, coping needs to change over time and across different situations to be effective (Lazarus, 1993). Lazarus and Folkman (quoted in Lazarus, 2000) therefore emphasise the fit between person and environment. However, this

relationship is a constantly changing process that depends on shifting work demands and settings and a fluid personal outlook.

Briggs (1996) focuses on a systems view, identifying phases of a change process. She recognises that although change is inevitable, people often feel anxious and fearful towards the prospects of change, due to feelings of insecurity brought on by the unknown and unfamiliar. The first phase of an effective change process is therefore overcoming these fears. People's perceptions are influenced by feelings of helplessness and loss of control. Control over the process of change therefore appears to be key issue in how individuals perceive change. Lau and Woodman (1995) supports this notion by identifying an individual's locus of control as an important factor predicting general coping behaviour. This refers to a person's beliefs concerning the source of control over events affecting them. They found that people, who strongly believe that their locus of control is internal, generally feel that they have control over events. Even when change is attributed to external causes, these individuals still believe in being able to influence the change and thus are not afraid of change. They generally cope better with change (perceived as positive or negative), than people whom believe that they cannot control events and therefore display an external locus of control.

Studying coping and defence mechanisms, Cramer (1998) postulates that both these processes function to diminish affect in the face of stress and could be seen as ways to adapt. However, coping processes should be seen as conscious and intentional, whereas defence mechanisms are unconscious and unintentional. Kelly's Personal Construct Theory (quoted in Bannister, 1962) is based on the assumption that 'men may be thought of as scientists in the sense that each is concerned with the prediction and control of his environment (p104)'. Thinking is thus central to man seeking to predict and control his environment, rather than seeing coping as an unconsciously motivated defence mechanism or a complex learned response. Kelly further identifies coping as a function of discrimination and control (Maddi, 1989). People who do not have the capacity to discriminate or differentiate between that which is more and that which is less important in a situation, will either tend to experience most aspects related to a situation as either relatively equally important or equally unimportant. Similarly, people who are unable to vary their levels of control in a given situation will either tend to exercise high levels or low levels of control for all aspects related to the situation.

Personality differences associated with leadership effectiveness have also been found to play a role in effective coping. People capable of handling high degrees of stress have personality structures also described by the term "hardiness" (Kobasa, 1979). This is characterised by three general characteristics differentiating them from others namely:

- a) The belief that they can control or influence the events of their experiences.
- b) The ability to feel deeply involved in or committed to the activities of their lives.
- c) The anticipation of change as an exciting challenge to further development.

Motivation or personal drive also plays a role in a person's attitude towards a situation. Studying employees' willingness to participate in planned organisational change, Miller, Johnson and Grau (1994) found that a high achievement need, correlated with a favourable attitude towards change.

3.5 Assessment of effective leadership and coping

In order to optimise organisational and individual coping within fast changing environments characterising modern day work environments, the need to identify, as well as predict effective leadership behaviour still exists. This has motivated numerous research studies using conventional fixed-format and self-report questionnaires. However, Claeys, de Boeck, Van den Bosch, Biesmans and Böhrer (1985) remind us that traditional personality inventories consist of a series of items that have to be answered. The rationale to such fixed format inventories are that the subject reveals his personality by recognising themselves — to a greater or lesser degree — in item statements that are composed by the investigator. The subject is confronted with a series of standardised items, but one cannot be certain if those inventory items cover the personality of a specific individual in a reasonable way. Furthermore, Van Rensburg and Crous (2000) indicate that studies based on pencil-and-paper personality questionnaires and leadership behaviour questionnaires may tend to only measure test behaviour, rather than ideal work behaviour.

Reviewing leadership literature, Beyer (1999) comes the conclusion that this phenomenon is too situation-specific to allow the generalisations, which researchers seek. Yet researchers investigating charismatic and transformational leadership focuses on the understanding of leadership from a psychological paradigm and predicting its results. However, according to the writer these approaches ignore the unique circumstances or the situation in which leadership occur. Beyer further recommends a shift to qualitative and multi-method research allowing for greater abstraction before

results can be compared and made cumulative. Such studies will also expose the difficulty of looking at variables as discrete from one another.

Measuring and predicting effective coping also appears to be problematic. Oakland and Ostell (1996) found that researchers are faced with numerous options for conceptualising and measuring coping. However, qualitative data suggest that there are limitations that indicate the need for refining quantitative coping measures, as well as the need to consider alternative methodologies in order to better understand the relationship between stress, coping and health. Deductions implying that coping strategies can be labelled as effective or ineffective disregard the differences between individuals and situations. There are also many contradictions in results of studies regarding coping and coping strategies. Furthermore, coping is a dynamic and complex process involving external resources and situational factors, which influence coping outcomes and cannot be assessed purely by quantitative measures. Somerfield and McCrae (2000) stresses that to overcome documented problems in coping research aiming to identify general or universal coping strategies, researchers must focus on responses specific to each stressful context, identifying individual differences in personality traits that affect optimal ways of coping. However, Ben-Prath, Waller and Butcher (1991) noted that situation specific cognitive-behavioral checklists or rating scales in the assessment of coping, may contain items that are inapplicable for some individuals. This may lead to research findings of some situational effects on coping, which may be inaccurate, or inflated by item inapplicability. These problems may therefore require researchers to use alternative methodologies, which combine both quantitative and qualitative data.

Within organisations the rating scale is the most widely used method of obtaining performance measures for individuals. Although rating errors may contaminate performance ratings, these performance ratings are often the only means for establishing criterion performance scores against which to validate selection, promotion and other personnel decisions (Borman, 1979). Furthermore, Pulakos (1986) found that accuracy of performance ratings could be increased in terms of reliability and validity by training raters, to reduce common psychometric errors in their ratings. This type of training should be directed at training raters to use a common frame of reference for observing, interpreting and judging ratee performance. Performance rating scales, which provide raters with a common set of categories corresponding with dimensions, assessed during performance judgements may also enhance rating accuracy (Pulakos,

1984). With regards to identifying suitable raters, Borman (1977) investigated intraindividual consistency of performance rating accuracy, rating errors, halo, leniency or
severity, and restriction of range. He found within task consistency to be higher than
across task consistency, suggesting that different individuals' abilities to accurately rate
performance may be situation specific rather consistent for the individual. It would thus
be difficult to identify accurate raters based on a generalised characteristic.

4 STATEMENT OF RESEARCH PROBLEM / HYPOTHESIS

The following hypothesis will be tested:

4.1 Primary hypothesis

H(1) During organisational change, managers obtaining better Overall performance ratings, as rated by superiors and human resource practitioners in terms of their person-job-match, will obtain significantly higher scores, on performance rating scale items measuring behaviour associated with effective leadership, than managers displaying low levels of person-job-match.

4.2 Secondary hypothesis

- H(2) Managers in the High performance group (as rated by superiors and human resource practitioners) will obtain significantly different scores than Managers in the Low performance group on *The Wheel* dimensions of Attitude, Discrimination, Involvement, Control, Affective Focus and Coping, as well as Number of Segments completed for each of the key words presented.
- H(3) Due to the impact of situational or contextual factors (organisational change), *The Wheel* profiles presented for the key words "My Work" will be significantly different from *The Wheel* profiles presented for "My Life" and "Other People's Perceptions".
- H(4) *The Wheel* scores for basic dimensions Attitude, Discrimination, Involvement, Control, Coping and Affective focus will correlate with performance rating items measuring behaviour related to each dimension.
- H(5) On a qualitative level, managers in the High performance group will produce different responses during a free association assessment than less effective respondents.

5 METHOD OF RESEARCH

5.1 Sampling

The sample group consisted of (N=75) managers from a South African Engineering organisation. This convenience sample was selected haphazardly from a total group of 143 middle and senior managers. Although Asian, Coloured and Black participants were included, the majority of the sample consisted of White (92%) males (93.3%). The majority (50.7%) indicated English as first language, whilst 42% were Afrikaans speaking. Ages ranged between 31 and 60 years with a mean age of 44.53 for the sample group. With regards to formal qualifications 9.3% completed Grade 12, 34.7% obtained Diplomas, 29% were Graduates and 25.3% Post Graduates. Participants were selected from six different business units, representing the Manufacturing (56%), Civil Engineering or Construction (38.6%) and Corporate Services Sectors (5.4%). Years of management experience ranged from 1 to 30 years, with an average of 13.8 years experience for the sample group.

Seven raters, consisting of four Human Resources Practitioners and three Superiors, conducted performance ratings.

5.2 Measuring instruments

Moving away from conventional personality and behaviour questionnaires, this study proposes the use of *The Wheel* (Addendum B) as assessment instrument, to measure and predict coping strategies, as well as leadership effectiveness within changing environments. This is a free-format assessment instrument, which aims to quantify individuals' subjective perceptions and subsequent behaviour in different situations (Reinfield, 1995). Considering literature data examined, the constructs measured by *The Wheel* appear to be related to leadership effectiveness and coping (Addendum D). In contrast to fixed-format personality inventories and leadership rating scales, this assessment instrument is designed to elicit the respondent's projection of his / her inner feelings, needs and perceptions. Furthermore, this unstructured technique or projective test presents the subject with open-ended key words to which to respond and subjects are not required to answer questions that they may feel are irrelevant or confusing. Being less obvious in the intent, *The Wheel* should be less subject to faking and response sets (Aiken, 1994).

Designed by Dr Ben Shalit, The Wheel can be defined as an assessment instrument that quantifies people's own realities in a qualified framework that enumerates their

cognitive, emotive and active processes (Reinfield, 1995). This is based on the assumption that individuals interpret situations subjectively and therefore may adopt quite different attitudes to, and act quite differently in, the same situation. *The Wheel* questionnaire consists of both an open-ended part where the respondents state their free associations to a given concept and a forced choice part where they indicate their priorities and attitudes to their own free associations. It assesses their attitudes and values, as well as their ways of coping to various situations (Mårtenson & Mårtenson, 1995).

The analysis of the responses is both qualitative and quantitative. The qualitative interpretation requires analysis of the contents of free associations, whilst the quantitative analysis considers the responses to the scale in the instrument as well as calculating a set of indexes. On a quantitative level, these constructs include Attitude, Discrimination, Emotional involvement, Control, Affective focus and Coping (Addendum D). On a qualitative level, the individual or subjective reactions and perceptions of participants are obtained from investigating the contents of free associations. This may indicate specific themes or common factors underlying individuals' perceptions and coping strategies to deal with organisational change.

The Wheel is based on Lazarus' research on the concept of subjective observation and coping (Reinfield, 1995). The process of perception, which contains a cognitive conceptualisation, a subjective assessment, and consequently, an evaluation of the situation precede action or behaviour. An individual's behaviour and attitude in different situations is thus determined by his / her subjective interpretation of the situation, rather than the situation per se (Reinfield, 1995, Mårtenson & Mårtenson, 1995).

According to Reinfield (1995), the basic assumptions underlying *The Wheel* indicate that in order to act in a given situation, we must first be able to picture and interpret the situation. We obtain interpretation through a process of perception. The interpretation we make of a situation will determine out attitude to the situation and how we react to, or act in the situation. Furthermore, the process of perception is based on the interpretation between our observations and our previous experiences, expectations, desires and fears. Thus different persons may interpret the same situations quite differently.

Ben Shalit's Sequential Adjustment Model (SAM) describes the process leading up to our final appraisal of a given situation (Reinfield, 1995). The premise underlying subjective observation is that individuals perceive and experience situations differently

as a result of differences in exposure and varying preferences. According to Reinfield (1995) *The Wheel* is this designed to map the various stages in this process, which consists of:

- a) Appraisal, which is described as the process of interpreting the situation and assessing our relationship to it.
- b) *Mobilisation*, which involves the process of preparing our resources. It includes our willingness to act in the situation.
- c) Realisation, which is described as the process of determining the form for our behaviour in a given situation.

Although relatively unknown, South African norms have been developed for *The Wheel* profiles generated for the key words "My Life", "My Work" and "Others' Perceptions". Norming analysis was done for the basic dimensions Discrimination, Involvement, Control and Attitude (Addendum E). Intercorrelations between these dimensions were found to less than 0.20 as required for reliable interpretation of profile structures (Mådberg, 2000). Reliability coefficients for the basic dimensions Discrimination, Involvement, Attitude and Number of Segments indicate good stability for the three key words "My life", "My Work" and "Others' Perceptions" (Addendum F). Except for the Control dimension, subjects tend to display relatively consistent scores for all the other dimensions when responding to the three different key words. Research done by Shalit, involving several groups of respondents and varied time intervals also showed good test-retest reliability (Shalit, 1979). Yet, *The Wheel* is designed to indicate changes that people experience over time and especially when individuals are exposed to specific stimuli, scores on different dimensions are not expected to remain stable (Shalit, 1979).

For the purpose of this study evaluative ratings were used to rate participants' performance as leaders on a six-point Likert scale (1=low, 6=high). This Performance questionnaire consisting of 46 items (Addendum A) was compiled by four human resource practitioners, based on specific job requirements for managers within the organisation. The scales were used to rate participants, in terms of their perceived performance, as well as to rate participants' positions, in terms of ideal performance required for effective leadership within a context of organisational change and transformation.

5.3 Procedure (research design, administration of tests, application of experimental procedures)

The Wheel (Addendum B) was completed by each participant, as part of a psychometric evaluation conducted during organisational change. Each participant completed one profile for each of the following key words: "My Life", "My Work" and "Others' Perceptions". Assessments were done individually, according to standard instructions for this instrument (Addendum C).

Participants' leadership behaviour and performance were evaluated in terms of a six - point Lickert scale, consisting of 46 items measuring specific behaviours and individual characteristics associated with effective leadership behaviour within a context of organisational change (Addendum A). Raters were informed that all ratings will be anonymous and confidential, in order to encourage objective ratings.

Raters were further required to indicate ideal or required levels of performance on each performance scale, specific to the requirements of the participant's position.

Overall performance scores were calculated for each participant. As the job requirements were different for the various positions involved, the Overall performance scores were based on the gap between the participants' actual performance scores and the ideal scores for their positions. Participants were divided into three performance groups, based on these Overall performance scores. Thereafter, in order to calculate correlations between The Wheel profiles and perceived performance of the different performance groups, 14 items (Addendum G) were selected from the original 46. This selection was based on the literature review data regarding effective leadership and coping with change, the raters' ranking of items in terms of requirements for effective leadership performance during organisational change and constructs measured by The Wheel.

5.4 Statistical techniques used

The Statistical Package for the Social Sciences (SPSS) for Windows (Version 11.0.1) was used to analyse the data for this study. Techniques applied include Cronbach's Alpha, Oneway ANOVA, Dunnett T3 Multiple comparison, Between Subject Effects Tests, Multivariate Tests, Paired Sample Tests, Box's Tests of Equality of Covariance Matrices, Tests of Equality of Error Variance.

6 RESULTS

An Overall Performance Score was obtained for each participant based on a gap analysis calculated for the participants' actual performance rating and the level of performance required for his / her position. These scores were used to divide the sample group into three performance categories with (n=25) in each performance group. The High performance group therefore consisted of the n=25 subjects with the smallest numerical difference between actual rating by raters and ideal performance required for his / her position. The Low performance group consisted of the N=25 candidates with the biggest difference between required performance and actual performance ratings.

In order to compare participants' overall performance scores and The Wheel profiles, 14 items (Addendum G), were selected from the original 46 items (Addendum A). This selection was based on raters' ranking in terms of requirements for effective leadership performance during organisational change, literature review data regarding coping and effective leadership within changing environments and constructs measured by *The Wheel. Cronbach's Alpha* was used to estimate the reliability of the items selected to differentiate between the subjects in terms of leadership effectiveness. The 14 items, selected from the original 46 items, showed high internal consistency reliability (Alpha=0.83) (Addendum H). The items selected therefore appear to be a reliable measure of a common factor displayed by the participants.

To test the H(1), the three performance groups (High, Medium and Low) were compared in terms of the 14 performance rating items selected, by using a Oneway ANOVA to determine the statistical significance of differences between the mean scores of the three performance groups. The omnibus F-statistic was significant (p<0.01), which indicated that significant differences between group means exist. Follow-up multiple comparisons, using Dunnett T3, further indicated significant differences (p<,01) between each of the performance groups compared in terms of the mean scores obtained for the 14 performance rating items selected. Table 1 summarises the results of the Dunnett T3 test of Multiple Comparisons between the High, Medium and Low performance groups and mean scores for the selected 14 performance items.

Table 1

<u>Dunnett T3 test of Multiple Comparisons between the High, Medium and Low</u>
performance groups in terms of mean scores for selected performance items. (N=75)

Performance Group	Performance Group	Mean Difference	Std.Error	Sig.
(1)	(J)	(I-J)		
Most Effective	Average	.7579*	.13538	.000
	Least Effective	1.3563*	.11151	.000
Average	Most Effective	7579*	.13538	.000
	Least Effective	.5984*	.11649	.000
Least Effective	Most Effective	-1.3563*	.11151	.000
	Average	5984*	.11649	.000

Results in Table 1 indicate that differences between the three performance groups' ratings for selected items appeared to be significant. Differences in mean performance scores obtained by the different performance groups can therefore not be ascribed to random error, but indicates different performance levels on the 14 items measured.

To test H(2) the three performance groups (High, Medium and Low) were compared in terms of *The Wheel* profiles for each groups. A General Linear Model was used to investigate Between-Subject Factors correlations. Box's Test of Equality indicated that the covariance between dependent variables were not equal for the Number of Segments completed by the different performance groups. A Multiple comparison, using Dunnet T3 further indicated a significant difference (p<,05) between the Number of Segments completed by the High performance group for key words "My Life" and the Number of Segments completed by the Low performance group for key words "My Life".

To test H(3) Paired Sample Tests were used to determine the correlations and differences between the scores for all the corresponding constructs on *The Wheel* as measured for key words "My Life", My Work" and "Others' Perceptions".

Table 2 summarises the results of the T-Test Paired Correlations between *The Wheel* scores for corresponding constructs of "My Life", "My Work" and "Others' Perceptions".

Table 2

<u>T-Test of Paired Sample Correlations between *The Wheel* Constructs for "My Life", "My Work" and "Others' Perceptions" (N=75)</u>

Pair	Wheel Construct 1	Wheel Construct 2	R
1	Life Attitude	Work Attitude	.62***
2	Life Attitude	Others Attitude	.36*
3	Work Attitude	Others Attitude	.33*
4	Life Discrimination	Work Discrimination	.15
5	Life Discrimination	Others Discrimination	.29*
6	Work Discrimination	Others Discrimination	.87***
7	Life Involvement	Work Involvement	.41***
8	Life Involvement	Others Involvement	.30**
9	Work Involvement	Others Involvement	.62***
10	Life Control	Work Control	.37***
11	Life Control	Others Control	.25*
12	Work Control	Others Control	.11
13	Life # of Segments	Work # of Segments	.68***
14	Life # of Segments	Others # of Segments	.72***
15	Work # of Segments	Others # of Segments	.72***

^{*} p< ,05

Results in Table 2 indicate significant correlations between all the corresponding constructs presented for *The Wheel* profiles with the exception of Life Discrimination and Work Discrimination, and Work Control and Others Control.

Table 3 summarises the results of the T-Test of Paired Differences between *The Wheel* scores for corresponding constructs of "My Life", "My Work" and "Others' Perception".

^{**} p< ,01

^{***} p< ,001

Table 3

<u>T-Test of Paired Sample Differences between *The Wheel* Constructs for "My Life", My Work" and "Others' Perceptions" (N=75)</u>

Pair	Wheel C1	\overline{X} C1	Wheel C2	\overline{X} C2	\overline{X} Dif.	SD	t
1	Life Attitude	3.72	Work Attitude	3.41	.31	.70	3.87***
2	Life Attitude	3.72	Others Attitude	3.85	13	.70	-1.63
3	Work Attitude	3.41	Others Attitude	3.85	44	.86	-4.46***
4	Life	.81	Work	.57	.24	1.06	1.95
	Discrimination		Discrimination				
5	Life	.81	Others	.61	.21	1.02	1.74
	Discrimination		Discrimination				
6	Work	.57	Others	.61	03	.14	-2.12*
	Discrimination		Discrimination				
7	Life	9.65	Work	9.62	.03	3.97	.06
	Involvement		Involvement				
8	Life	9.65	Others	9.66	01	4.21	03
	Involvement		Involvement				
9	Work	9.62	Others	9.66	04	3.26	11
	Involvement		Involvement				
10	Life Control	2.45	Work Control	2.25	.20	.32	5.24***
11	Life Control	2.45	Others Control	2.59	15	.28	-4.53***
12	Work Control	2.25	Others Control	2.59	34	.38	-7.72***
13	Life # of Seg-	7.94	Work # of	8.02	08	1.92	36
	ments		Segments				
14	Life # of Seg-	7.94	Others # of	8.02	08	2.26	31
	ments		Segments				
15	Work # of	8.02	Others # of	8.02	0	1.79	0
	Segments		Segments				

^{*} p< .05

Results in Table 3 indicate that Attitude scores for "My Work" were significantly lower than Attitude scores for both "My Life" and "Others' Perceptions". Discrimination scores for "My Work" also appears to be significantly lower than Discrimination scores for "Others' Perceptions". Control scores for "My Work" was significantly lower than Control

^{**} p< .01

^{***} p< .001

scores for both "My Life" and "Others' Perceptions", whilst Control scores for "Others' Perceptions" was significantly higher than Control scores for both "My Life" and "My Work".

To test H(4) the results of Performance Ratings for all the participants (N=75) were divided into two categories for each or the 14 items. The low score category consisted of participants with performance scores ranging from one to three and the high score category included those participants who obtained performance scores ranging from four to six. The two resulting groups for each of the 14 Performance rating items were compared in terms of mean scores for each of *The Wheel* dimensions measured. A General Linear Model was used to investigate Between-Subject Factors. The Analysis of Variance (ANOVA) or Tests of Between-Subject Effects indicated the following significant variances between high and low performance groups:

(p < .01)

High Performance group for Emotional resilience (Item 15) displayed higher attitude scores in profiles generated for "My Work" than the Low Performance Rating group F (1, 73) =3.8, p=.03.

(p < .05)

- High Performance group for Energy and Drive (Item 20), displayed higher Number of Segments generated for "My Life" than the Low Performance group F (1, 73) =4.175, p=.04.
- High Performance group for Decision-making (Item 8), displayed higher Number of Segments generated for "Others' Perceptions" than the Low Performance group F (1, 1, 73) =5.942, p=.01
- High Performance group for Task and Results Focus (Item 32), displayed higher Attitude scores in "My Work" than the Low Performance group F (1, 72) =4.55, p=.03
- Low Performance group for Task and Results Focus (Item 32), displayed higher Discrimination scores in "Others' Perceptions" than the High Performance group F (1, 72) = 4.18, p=.04
- Low Performance group for Flexibility (Item 18), displayed higher Control scores in "My Life" than the High Performance group F (1, 73) = 3.97, p=.05

To test H(5) the contents of free associations for *The Wheel* profiles generated for the key words "My Work" were captured and categorised according to common themes. These were compared for the High and Low performance groups. Common themes emerged, but differences between the High and Low performance groups were also evident. Both groups mentioned aspects such as job satisfaction, financial rewards, future planning, challenge and change to an equal extend. However, differences were noticed in terms of frequencies for the following themes featuring in the contents of the different groups. The Low performance group more often mentioned themes involving success and recognition, measurable goals and objectives, teamwork and co-workers, staff development, superiors, pressure or stress and the physical work environment. The High performance groups' *The Wheel* profiles more often referred to leadership, influence, self-development, performance and achievement.

7 DISCUSSION AND CONCLUSION

This study was motivated by a need for further research regarding effective leadership, especially within a context of change and organisational transformation. Furthermore, a move away from traditional, fixed format questionnaires, led to the use of a free association assessment instrument, *The Wheel*. This instrument allows for qualitative and quantitative interpretations of participants' free associations to key words "My Life", "My Work" and "Other Peoples' Perceptions". The results thus differentiate between individuals' subjective reactions to these contexts and could be expected to reflect the impact of situational factors, such as organisational change, on their functioning.

Results of this study firstly suggest that a variety of characteristics, behaviours and qualities, are associated with effective leadership and coping within changing environments. The fourteen items selected during this study showed high internal reliability consistency (Alpha=,83) and appeared to be related to overall leadership effectiveness within a context of organisational change. Examining the selected items individually, participants obtaining higher Overall performance scores obtained significantly higher performance rating scores on all fourteen selected items, than participants who obtained lower Overall performance scores. These results imply that a wide variety of factors, rather than one general factor, impact on leaders' overall performance. However, ranking the selected items in terms of the participants' performance ratings obtained (Addendum I), the High Performance Group's results indicate highest average scores for motivation, commitment, locus of control, energy and drive, and willingness to make decisions. Although commitment and energy and

drive also ranked in the top five for the Low Performance Group, the average scores indicate that this group may tend to focus more on making decisions, communicating and structuring than the High performance group.

In terms of assessing and identifying effective leaders within changing environments, variances on *The Wheel* dimensions of Attitude, Discrimination, Involvement, Control, Affective Focus and Coping, as well as Number of Segments completed for each of the key words presented, were anticipated for the different performance groups as indicated by *Overall Performance Scores*. However, only one of *The Wheel* dimensions was significantly different for the three performance groups. The High performance group obtained a significantly higher average Number of Segments for the key words "My Life" than the Low performance group. Higher Numbers of Segments are usually associated with a good self-image, the ability to experience things and to share ideas.

Research done by Mådberg (in Mårtenson & Mårtenson, 1995) indicates that The Wheel dimensions of Discrimination, Emotional involvement and Control have high stability across different contexts. High scores for a dimension within one context is therefore usually a good predictor of that participant's scores for the dimension within other contexts. Paired Sample Correlations conducted during this study confirmed this finding and indicated significant correlations between most of the Wheel dimensions measured for different contexts of "My Life", My Work" and "Others' Perceptions" (see Table 1). However, one of the distinctive characteristics of *The Wheel* is that it allows participants to distinguish between different contexts, rather than answering fixed format questions with regards to their lives in general. In this regard Shalit (1979) indicated that people may react differently to different situations and, especially when individuals are exposed to specific stimuli, scores on different dimensions are not expected to remain stable. Considering the context of organisational change, within which this study was conducted, significant differences was anticipated with regards to profiles generated for key words "My work". Results of Paired Sample Differences (see Table 2) confirmed this and results showed significant differences between Attitude, Discrimination and Control scores for profiles generated in response to the different key words presented. More specifically, within this context of organisational change participants displayed significantly less positive Attitudes towards "My Work", they seem to have experienced lower ability to Discriminate or differentiate between aspects associated with "My Work", than those associated with "Others' Perceptions", they also seem to have experienced lowest levels of Control towards aspects associated with "My Work". It therefore appears as if organisational change impacts on individuals' planning, prioritising and structuring of work related issues. Lower Control scores indicate that they seem to be less likely to actively exercise control / influence, to push for results or to take charge of the situation. Although low discrimination, together with low control scores may indicate greater flexibility and willingness to allow others to provide the lead, these lower scores may also indicate inability or unwillingness to make decisions, to take responsibility and to push for results. Lower Attitude scores furthermore indicate that these managers may also be quite critical towards their work and they experience some concerns or lower satisfaction in their work environment.

Considering correlations between individual Performance Rating items and *The Wheel* dimensions, correlations were expected between constructs that appeared to be related. Higher attitude scores, associated with more positive attitudes towards free associations generated for the key words "My Work", were found to be associated with being perceived as emotionally more resilient (p<,01) and more task and results focused (p<,05). Participants who generated higher Number of Segments or more free associations for key words "My Life", were rated as displaying more energy and drive (p<,05) and those generating higher Number of Segments for key words "Others' Perceptions" were perceived as more willing to make decisions (p<,05), than those generating fewer free associations. Higher Discrimination scores obtained in profiles generated for key words "Others' Perception" appears to be related to lower task and results focus (p<,05) and participants whose profiles reflected higher levels of Control with regards to associations generated for "My Life" tends to be perceived as being less flexible (p<,05) than participants with lower Control scores.

On a qualitative level this study predicted differences between *The Wheel* profiles generated by High and Low performance groups. Content analysis of *The Wheel* profiles for key words "My Work" indicated some differences between free associations generated by the High and Low performance groups. The High performers appeared more focused on self-development, rather than staff development in general. Although teamwork featured frequently in High performance group profiles, the Low performance group appeared to be substantially more focussed on teamwork, interaction and coworker issues. The Low performance group also mentioned superiors and control more often than the High performance group. The Low performance group seemed to focus more on measurable objectives and goals, success and recognition, whilst the High performers focused more on influence, general performance and achievement. Low

performance participants furthermore mentioned issues related to physical work environment, stress and pressure more often than the High performance group.

Results of this study suggest that, as indicated in existing leadership literature, various characteristics, traits, qualities and behaviours are associated with leadership effectiveness. In terms of utilising *The Wheel* as assessment instrument to measure and predict effective leadership within changing environments, the results indicate that there are some significant quantitative as well as qualitative differences between *The Wheel* profiles for High and Low performance groups. However, The Wheel results obtained during this study do not indicate specific profile characteristics, associated with overall leadership effectiveness and coping within changing environments. More consistent with expectations, *The Wheel* profiles seem to reflect the impact of situational factors or organisational change on participants' Attitudes, Discrimination and Sense of Control with regards to their profiles generated for key words "My Work". These construct scores were significantly lower than those generated for key words "My Life" and "Others' Perceptions".

Although this explorative study shows some promising results, there are limitations to consider. External validity issues needs to be addresses as this study was based on a small sample group (N=75), consisting of predominantly white males. Although *The Wheel* is used internationally and within cross-cultural contexts, these results may therefore not be representative of differences between cultural, racial and gender groups, and should not be generalised to other groups, without further research. In this regard, Cozby (1993) reminds researchers that small samples may lead to incorrect acceptance of Null Hypothesis, as the general principle is that larger samples increase the likelihood of obtaining significant results.

With regards to isolating variables in order to predict and measure effective leadership Anderson and Schneier (1978) warns that this may lead to mere descriptions of leaders, rather than the leadership process. *The Wheel* is designed to measure the coping process. However, due to sample size constraints, constructs measured by *The Wheel* were isolated and individually compared to performance ratings, thus not considering the coping process reflected in overall *The Wheel* profiles.

In terms of validity of the performance ratings used to identify High and Low performance groups, this study does not investigate the impact of rating errors such as halo effects and leniency, which according to Borman (1979) may lead to inaccurate performance scores and contaminated performance ratings.

Although several qualities associated with effective leadership also appears to be recognised as important factors in coping behaviour, this attempt to study these two phenomena simultaneously, together with the use of a relatively unknown assessment tool may have been somewhat over ambitious. Nevertheless, findings indicate some promising results with regards to measuring the impact of situational factors on individuals' functioning. Furthermore, overall The Wheel profiles, has not been studied in relation to either leadership effectiveness or coping behaviour and may be considered for future research.

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ADDENDUM A

Performance Rating Scale

Purpose

The primary purpose of this questionnaire is to:

- Gather crucial information required for benchmarking, as part of the Development Framework for Senior Managers, which is currently being developed by the organisation
- Identify strengths and development areas for succession planning and training purposes.
- 3. Identify future development needs within the organisation.
- 4. Clarify role expectations.
- 5. Identify crucial individual factors contributing to efficient leadership and management behaviour.
- 6. Validate current leadership assessment process.

Conditions

- Multiple raters will be required to rate each manager. This should enhance accuracy
 of ratings as well as ensure anonymity of raters.
- All information provided will be treated as strictly confidential and raters are to remain anonymous.
- Feedback to the organisation will be in terms of general patterns and not in terms of individual results.

Instructions:

- 1. Please rate the participant as accurate as possible on each of the following scales.
- Mark your answer by placing an X in the block, corresponding with the most suitable answer
- 3. Try to maintain and objective approach, focussing on the participant's effectiveness as leader / manager.
- If you are uncertain with regards to any of the rating scales, please ask for assistance.
- 5. Please complete all the items in this questionnaire

Individual Performance Ratings

Task Approach and Decision-making

1. Detail focus: Focus on detail, accuracy and precision. Analytical

2. Holistic Focus: Global, generalist or systems approach. Focus on "big

picture"

3. Practical: Works well with tangible, practical, here-and-now

issues

4. Theoretical: Interested in abstract and conceptual ideas. Looks for

underlying principles. Often academic focus

5. Long-term orientation: Considering long-term implications of decisions.

Anticipating outcomes

6. Innovative: Initiate new ideas and creative or untried solutions

7. Structure: Planning activities. Preference for structure,

processes, procedures and clear guidelines

8. Decision-making: Willingness to make decisions

9. Judgement: Tendency to display sound and efficient judgements

and decisions

Work pace Reaction time and activity levels. General

responsiveness.

11. Quality: Overall work quality and standards

12. Quantity: Overall productivity in terms of measurable

deliverables.

13. Time Management: Likeliness to utilise time effectively in order to meet

deadlines on time.

Personal Qualities

14. Locus of control: Tendency to take responsibility for outcomes and to

actively seek solutions for problems

15. Emotional resilience Maintains emotional stable and balanced approach.

/ Coping: Does not allow situational factors to influence

commitment.

16. Self –reliance: Tendency / preference to make decisions

independently. Can become idiosyncratic.

17. Life orientation: Approach to different situations. Tendency to perceive

situations in specific manner.

18. Flexibility / Adaptability: Ability to change direction, listen to new ideas and

adapt plans accordingly.

19. Tolerance of pressure: Likeliness to cope effectively with various demands,

inflexible deadlines and external pressures.

20. Energy and drive: Tendency to display an energetic, enthusiastic and

action-oriented approach to different situations.

21. Learning orientation: Seeks opportunities for self-actualisation and

personal adaptation.

22. Openness to criticism: Willingness to discuss issues and to learn from

mistakes.

23. Courage / confidence General confidence in own abilities to deliver desired

results and achieve goals.

Interpersonal Orientation

24. Interaction / inclusion needs: Need for social interaction and contact with external

environment.

25. Self-expression: Preference / tendency to share personal views and

feelings.

26. Sensitivity: Emotional sensitivity and awareness of interpersonal

dynamics and feelings.

27. Team focus: Preference for working within a team and identify with

a group.

28. Interpersonal tolerance: Awareness of and tolerance for individual and cultural

differences.

29. Trust: Willingness / tendency to accept others at face value.

Motivation and Drive

30. Commitment: Gets involved, motivated and enthusiastic. Wants to

make a difference.

31. Achievement Drive: Performance orientation. Need to achieve, to be

successful and to receive recognition for efforts.

32. Task / Results Focus: Concern with production and getting the job done.

33. People focus: Concern with human issues and well-being of others.

Seeks good work relationships.

34. Variety and stimulation: Tolerance / need / preference for variety, stimulation

and change

35. General motivation: Actively drives own efforts to reach goals. Motivated

and displays a strong inner drive.

Leadership Orientation

36. Leadership focus: Actively managing the efforts of others in order to

achieve results. Enjoys and seek leadership role.

37. Persuasion: Utilise persuasive strategies to elicit commitment to

plans, ideas or products.

38. Dominance / Assertiveness: Tendency to be assertive, competitive, controlling and

domineering.

39. Service orientation: Willingness to divert from own targets and goals to

assist others.

40. Participation & Consensus: Likeliness of actively including others in consensual

decision-making. Actively seeking others' ideas.

41. Co-operation: General co-operation and willingness to sometimes

compromise own ideas.

42. Verbal communication: Ability to communicate relevant information in a clear,

integrated manner.

43. Written communication: Ability to formulate integrated and accurate written

reports and presentations.

44. Delegation: Ability to delegate important tasks, allowing others to

take responsibility and to develop their own skills.

45. Developing subordinates: Actively creates opportunities to empower and

develop skills of followers. Encourage autonomy.

46. Coaching orientation: Willingness / ability to provide constructive feedback

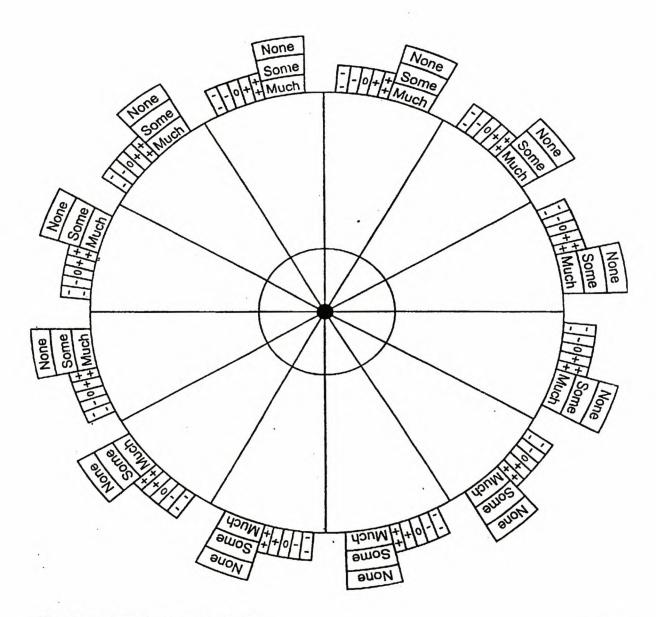
to subordinates and to address problems without

being too harsh.

ADDENDUM B

The Wheel Questionnaire

Name:	Date:	
Key words:		the wheel



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ADDENDUM C

The Wheel Instructions

INSTRUCTIONS



(Example "your life", "your job")





What do you consider characterises your XXX, what are the factors or aspects you feel to be typical for your XXX - positive or negative? Please write down each aspect or factor in a separate sector of the circle.

There is no right or wrong answer, each person has a different picture of what is typical for his or her XXX. Write down as many or as few factors as you wish - but please write each factor in a separate sector.

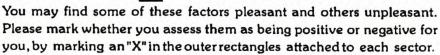


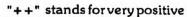


Please rank them in their order of importance for you. The factor you find most important, rank first by entering the figure "1" in the section of the sector marked off by the inner circle. The factor judged by you to be the next important, mark "2" and so on; until you have ranked all factors.

You may find that some factors are equally important for you. These you can rank by using the same number. If, for instance you use the figure "3" several times, the next level is still "4".







"+" stands for positive

"0" neither positive or negative

"-" stands for negative

"--" stands for very negative





You probably feel that you can affect or control some of these factors to a large extent, whereas others you can control to a lesser extent or not at all.

Mark an "X" in the rectangle with "much" if you feel that you have much control over the factor, mark "some" if you feel you have some control, and mark "none" if you feel you have no control at all.

INSTRUCTIONS



(Example "How do other people perceive you?")



What do other people characterise as typical of you? What is your opinion about other peoples perception of you?



Prioritise the above characteristics in order of how IMPOR-TANT and TYPICAL people find them for you.



How positive or negative do other people consider these characteristics?



How much control do you have over these characteristics?

ADDENDUM D

The Wheel Constructs

1. ATTITUDE

A predisposition towards a stimulus, an event, a key word or a situation. Attitude is situational, it is predominantly aspect related and it may vary form one situation too another. However, a more definite attitude trend may indicate a more permanent state of mind / life position.

Associated qualities

<u>HIGH</u>	<u>MEDIUM</u>	<u>LOW</u>
Positive	Balanced	Critical / Strict
Comfortable, satisfied	Composed	Cautious, Concerned
Relaxed	Constructive	Tense, anxious, strained
Uncritical and compliant		Negative or doubtful

2. DISCRIMINATION

Distinguishing concepts from each other in terms of importance in relation to a situation; perceiving patterns in experiences.

The ability to give something structure – possibly a positive quality.

The need for structures - possibly a negative quality due to over-structuring and a certain degree of rigidness or inflexibility.

Associated qualities

<u>HIGH</u>	<u>MEDIUM</u>	LOW
Prioritises well	Flexible	Holistic view
Thinks things through	Change oriented	Intuitive
Analytical, accurate and precise	Adaptable	Creative
Practical and systematic		

3. INVOLVEMENT

Emotional charge or total involvement when faced with a stimulus, regardless of whether it is experienced positively or negatively. This also reveals inner driving force.

Drive manifests itself either as an ability to get involved in something or someone and indicates energy when faced with various situations. It can also indicate a need due to inner restlessness.

Associated qualities

<u>HIGH</u>	<u>MEDIUM</u>	LOW
Energetic and active	Controlled	Calm and reserved
Committed and involved	Composed	Co-operative or undecided
Determined and ambitious	Confident	Uninvolved or withdrawn
Sensitive and sympathetic	Relaxed	Indifferent or emotionless

4. CONTROL

An individual's beliefs in being able to influence, steer or control events, situations and values.

Being able to affect things gives influence and control over situations and the ability to act. The need to control may indicate difficulty in adapting due to a tendency to become domineering. It may also indicate willingness to take responsibility for outcomes.

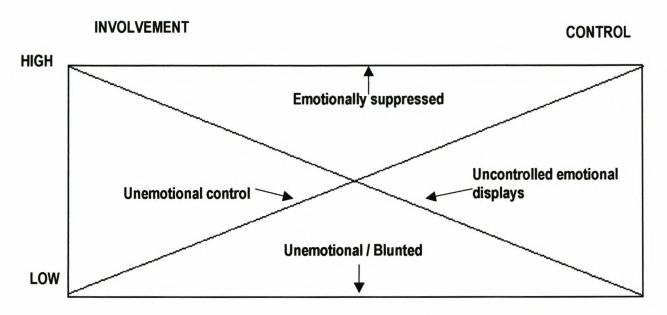
Associated qualities

MEDIUM	LOW
Flexible	Subordinate
Adaptable	Can take orders / listen
	Humble and modest
	Passive and resigned
	Feels helpless and afraid
	Needs guidance
	Flexible

5. AFFECTIVE FOCUS

Shalit's Aggression dimension

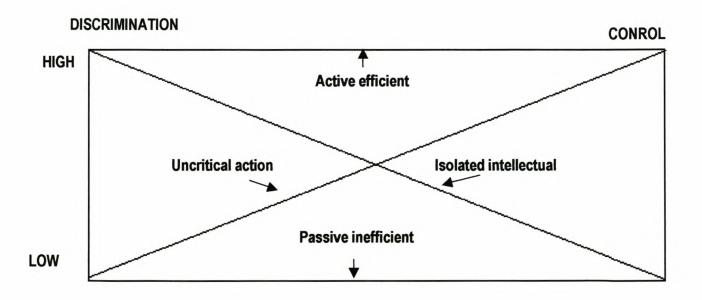
The ability to deal with feelings under stress as indicated by involvement and control scores.



6. COPING

Kelly's Coping dimension

The ability to deal with a situation under stress, focusing on the problem. Indicated by discrimination and control scores.



ADDENDUM E

The Wheel: South African Norms

Limits of the variables Discrimination, Involvement, Power and Attitude for classification into categories are defined by multiples of the 20th percentile, thus with approximately even proportions of individuals classified to five groups. The lowest categories are coded 1 and the highest 5. (N=762)

Variable	My Life	My Work	Others Perceptions
Category			
DISCRIMINATION	<u> </u>		
1	0.0329	0.0339	.0.0309
2	.330509	.340509	.310499
3	.510669	.510669	.500659
4	.670839	.670829	.660829
5	.840920	.830920	.830920
INVOLVEMENT			
1	0 - 8	0 – 7	0 – 6
2	9 – 10	8 – 9	7 – 8
3	11 – 12	10 – 11	9 – 10
4	13 – 15	12 – 15	11 – 14
5	16 - 24	16 - 24	15 – 24
CONTROL			
1	1.0 - 2.169	1.0 - 1.999	1.0 - 2.199
2	2.170 - 2.379	2.000 - 2.249	2.130 - 2.339
3	2.380 - 2.549	2.250 - 2.499	2.340 - 2.559
4	2.550 - 2.749	2.500 - 2.669	2.560 - 2.749
5	2.750 - 3.0	2.670 - 3.0	2.750 - 3.0
ATTITUDE			
1	1.0 - 3.759	1.0 - 3.509	1.0 - 3.429
2	3.760 - 4.119	3.510 - 3.999	3.430 - 3.839
3	4.120 - 4.339	4.000 - 4.279	3.840 - 4.119
4	4.340 - 4.659	4.280 - 4.599	4.120 - 4.449
5	4.660 - 5.0	4.600 - 5.0	4.500 - 5.0

ADDENDUM F

Reliabilities. Alpha coefficients by the SPSS – routine. N=762

Index	Sum of three Key word results (alpha)			
Discrimination	.855			
Involvement	.762			
Control	.556			
Attitude	.691			
No. Of Segments	.823			

ADDENDUM G

Items selected for Overall Performance Scores

ITEM	DESCRIPTION	DEFINITION
Item 5	Long Term Orientation	Considering long-term implications of decisions. Anticipating outcomes
Item 7	Structure	Planning activities. Preference for structure, processes, procedures and clear guidelines
Item 8	Decision-making	Willingness to make decisions
Item 9	Judgement	Tendency to display sound and efficient judgements and decisions
Item 13	Time management	Likeliness to utilise time effectively in order to meet deadlines on time.
Item 14	Locus of control	Tendency to take responsibility for outcomes and to actively seek solutions for problems
Item 15	Emotional Resilience / Coping	Maintains emotional stable and balanced approach. Does not allow situational factors to influence commitment.
Item 18	Flexibility	Ability to change direction, listen to new ideas and adapt plans accordingly.
Item 19	Tolerance of Pressure	Likeliness to cope effectively with various demands, inflexible deadlines and external pressures
Item 20	Energy and Drive	Tendency to display an energetic, enthusiastic and action- oriented approach to different situations.
Item 30	Commitment	Gets involved, motivated and enthusiastic. Wants to make a difference.
Item 35	Motivation	Actively drives own efforts to reach goals. Motivated and strong inner drive.
Item 42	Verbal communication	Ability to communicate relevant information in a clear, integrated manner.
Item 44	Delegation	Ability to delegate important tasks, allowing others to take responsibility and to develop their own skills.

ADDENDUM H

Cronbach Alpha for selected Performance-Rating Items

Item-total Statistics		N of Cases = 75		N of Items = 14
Scale Mean if		Scale Variance if Item Deleted	Corrected Item Total Correlation	Alpha if Item Deleted
Item 5	13.08	65.15	0.49	0.81
Item 13	13.40	64.10	0.47	0.81
Item 20	13.72	64.58	0.57	0.81
Item 14	13.50	65.36	0.50	0.81
Item 8	13.73	67.95	0.29	0.83
Item 42	13.62	70.21	0.23	0.83
Item 35	13.88	61.62	0.66	0.80
Item 30	13.90	64.57	0.62	0.81
Item 19	13.38	63.24	0.65	0.80
Item 9	13.21	65.08	0.50	0.81
Item 44	13.29	63.50	0.57	0.81
Item 15	13.21	63.95	0.49	0.81
Item 18	13.57	68.78	0.28	0.83
Item 7	13.74	69.75	0.17	0.84
RELIABIL	ITY COEFFICIEN	ITS		
ALPHA =	.8305			

ADDENDUM I

Mean Scores and Ranking of High, Medium and Low Performance Groups

Item Description		High Performance Group		Average Performance Group		Low Performance Group				
		Rank	Mean	Median	Rank	Mean	Median	Rank	Mean	Median
35	Motivation	1	4.92	5	1	4.4	4	8	3.12	3
30	Commitment	2	4.88	5	2	4.24	4	4	3.36	3
14	Locus of control	3	4.68	5	9	3.52	4	6	3.28	3
20	Energy & Drive	4	4.64	5	3	4.2	4	5	3.28	3
8	Decision making	6	4.56	5	5	3.92	4	1	3.64	4
7	Structure	5	4.56	5	8	3.6	4	3	3.44	4
13	Time management	7	4.48	5	4	3.96	4	11	2.84	3
19	Tolerance of pressure Verbal	8	4.44	5	7	3.68	4	13	2.8	3
42	Communication	10	4.36	5	6	3.72	4	2	3.6	3
9	Judgement	9	4.36	5	13	3.12	4	10	2.88	3
5	Long term	11	4.24	4	12	3.2	3	9	2.92	3
15	Emotional Resilience	12	4.2	4	14	3.12	3	14	2.8	3
44	Delegation	13	4.12	4	10	3.48	4	12	2.84	3
18	Flexibility	14	4	4	11	3.48	4	7	3.2	3