Personality type, self-actualisation and deep-seated values: A psychological profile of leaders in a financial organisation

by Frans Cilliers[*] and Melinde Coetzee[**]

Abstract

This study focused on the description of a psychological profile of a group of organisational leaders in a financial services organisation. The relationship between their personality type (measured by the Myers-Briggs Type Indicator Form Q), self-actualisation (measured by the Personal Orientation Inventory) and deep-seated values (measured by the Psychological Map) was analysed. The study also explored whether gender and ethnicity predicted leaders' personality type preferences, self-actualisation and deep-seated values, and whether males and females differ significantly regarding these variables. A cross-sectional quantitative survey was conducted on a sample of 64 black and white leaders at middle and senior level. The psychological profile that emerged from the descriptive, multiple regression analyses and the analyses for the tests for significant mean differences revealed a number of significant relationships between the psychological variables and differences between gender and ethnic groups. The practical implication is that the organisation needs to consider the information about the profile to streamline its future leadership development initiatives.

Key words: leadership, psychological profile, self-actualisation, personality type, deep-seated values, psychological map

1 Introduction

Organisational success in the contemporary competitive and complex business environment is dependent upon its managers and their leadership capability (Govender & Parumasur 2010; Mendes & Stander 2011; Tsai, Tsai, & Wang 2011; Van Niekerk & May 2012). Leadership is generally defined as the activity of involving, influencing, coordinating and guiding people's organisational activities so that they work willingly and responsibly towards attaining positive goals and outcomes for the organisation, based on strategy, challenges and goals (Avolio 2007; Bennis 2007; Kaiser, Hogan & Craig 2008; Maak & Pless 2006; Meyer & Boninelli 2007). Maak and Pless (2006) posit that responsible leadership requires relational intelligence and the ability to lead diverse groups of people within a global and multicultural context in a manner that allows them to find meaning, feel valued and respected and helps to develop their highest potential. Relational intelligence influences the climate or overall quality of the leader-follower

[*] Prof F Cilliers is a Professor in the Department of Industrial and Organisational Psychology at the University of South Africa.

[**] Prof M Coetzee is a Professor in the Department of Industrial and Organisational Psychology at the University of South Africa.

interaction, which is strengthened by mutual influencing around realness, the creation of meaning, motivation and commitment (Benjamin & Looby 1998). In the South African context, research by Vinger and Cilliers (2006) indicates people-oriented behavioural attitudes and values as important strengths of transformational leaders. Mendes and Stander (2011) and Stander and Rothmann (2008) also provide evidence of the importance of empowering leadership behaviour for staff engagement, commitment, job satisfaction and retention in the South African organisational context.

The present research examines the psychological profile that emerges from the dominant personality type preferences of mental or cognitive functioning (Jung 1959; 1971; Myers, McCaulley, Quenk & Hammer 2003), self-actualisation (Shostrom 1974), and deep-seated values (Beck & Cowan 2003). The leadership literature (De Charon 2003; Gibb 2003; Meyer & Boninelli 2007; Popper & Mayseless 2007) provides strong evidence that these behavioural constructs are related to individuals' relational intelligence and significantly influence the quality of the leader-follower relationship.

2   Objectives

This research focused on the description of a psychological profile of a group of organisational leaders in a financial services organisation by analysing the relationship between their personality type, self-actualisation and deep-seated values. Because leadership is enacted in a multicultural context, the study also explored whether gender and ethnicity predict leaders' personality type preferences, self-actualisation and deep-seated values, and whether males and females differ significantly regarding these variables. The research adds to the extant literature on leader development and follows a novel approach in that it looks at the relationship between three sets of variables on which limited research is available and determines how these variables relate to the relational intelligence of leaders in the South African financial services context. Understanding the psychological profile of leaders may help to raise awareness of strengths and growth areas for future leader development initiatives in the financial services arena.

3   Literature review

3.1   *Personality type*

The characteristics of leadership are identified as innate cognitive preferences for interacting with others, leveraging existing strengths and developing areas of potential weakness (Nohria & Khurana 2010). Jung (1971) contends that variations in behaviour can be explained by innate differences in the ways people prefer to take in information, make decisions, and generally deal with the world. This is expressed as personality type preference, defined as the dominant and conscious predisposition to either act or react in a characteristic manner when observing one's outer world and assigning meaning to each experience (Myers et al 2003).

According to Jung (1921, 1971), personality type preferences represent certain psychological types, based on intrinsically preferred motivational forces, that are formed before consciousness manifests and, in spite of later consciousness, pursue their inherent goals. Type is predispositioned within human beings and is a universal attribute (Jung 1923). Myers and Briggs (Myers & Myers 2003) extended the Jungian theory to form a discipline that fostered the understanding and usage of natural personality type preferences of mental or cognitive functioning in everyday life. The result was operationalised in the Myers-Briggs Type Indicator (MBTI) (Myers et al 2003).

The MBTI typology is composed of four pairs of opposite preferences, called dichotomies or dimensions of personality. These type dichotomies represent the natural ways in which people use their minds differently (Myers 1998). The first three dichotomies were part of Jung's original theory, and the fourth was added by Briggs and Myers (Garrety 2007; Leary, Reilly & Brown 2008):

- *Orientation of energy*: Extraversion (E) versus Introversion (I), or relative interest in outer (E) and inner (I) worlds.
- *Preferred modes of perception*: Sensing (S) versus Intuition (N)—whether people perceive through their senses (S) or through indirect perception by way of the unconscious (N). Sensing people focus on the here and now and intuitive people prefer to focus on future possibilities.
- *Decision-making*: Thinking (T) versus Feeling (F)—whether people make decisions using logic (T) or subjective values (F).
- *Preferences for dealing with the outer world:* Judging (J) versus Perceiving (P), which refer to a general method of dealing with the world. Judging people like order and a planned and organised approach to life and prefer to have things settled. Perceiving people embrace ambiguity, tend to like a flexible and spontaneous approach to life and prefer to keep their options open.

The MBTI preferences are complex and consist of many distinct but related facets. The facets (five per dichotomy) of each of the eight preferences (E-I, S-N, T-F, J-P) identify some of the distinctive ways in which people express their personality type (Kummerow & Quenk 2003). Table 1 summarises the twenty facets that describe the MBTI preferences.

Table 1
Personality type preferences and facets

Extraversion	ENERGY	Introversion
Initiating (E)	Ways to connect with others	Receiving (I)
Expressive (E)	Communicating feelings, thoughts, interests	Contained (I)
Gregarious (E)	Breadth and depth of relationships	Intimate (I)
Active (E)	Ways to communicate, socialise, learn	Reflective (I)
Enthusiastic (E)	Level and kind of energy	Quiet (I)
Sensing	**PERCEPTION**	**Intuitive**
Concrete (S)	Focus of attention	Abstract (N)
Realistic (S)	How information is used	Imaginative (N)
Practical (S)	What is made from what is known	Conceptual (N)
Experiential (S)	Ways to make meaning	Theoretical (N)
Traditional (S)	Value of traditions	Original (N)
Thinking	**DECISION-MAKING**	**Feeling**
Logical (T)	Ideal decision-making strategy	Empathetic (F)
Reasonable (T)	Actual decision-making style	Compassionate (F)
Questioning (T)	Ways to handle differences	Accommodating (F)
Critical (T)	General outlook on differences	Accepting (F)
Tough (T)	Manner of standing by a decision	Tender (F)
Judging	**LIFESTYLE**	**Perceiving**
Systematic (J)	General organisation and flow of life	Casual (P)
Planful (J)	Arranging leisure time	Open-ended (P)
Early starting (J)	Dealing with deadlines, time pressures	Pressure-prompted (P)
Scheduled (J)	Using schedules, routines	Spontaneous (P)
Methodical (J)	Sequencing smaller tasks to complete larger ones	Emergent (P)

Source: Adapted from Kummerow and Quenk (2003)

The MBTI assessment sorts people into one of 16 different though equally valuable personality types. Depending on their preferences, individuals are identified as extraverted or introverted, sensing or intuitive, thinking or feeling and judging or perceiving. They are given a four-letter designation (e.g. ESTJ) which indicates their dominant preferences, and therefore their personality type. While people possess and use qualities belonging to both poles of each dichotomy, the MBTI assessment allows for the recognition of those that are preferred, or used to respond first, most often, and most comfortably (Myers et al 2003). People's natural preferences cause them to develop habits of behaviour and personality patterns characteristic of the preferred processes (Jung 1971). Myers et al (2003) observed that some people are able to use their type preferences more effectively than others. Type psychologists encourage building on natural preferences before dealing with less preferred functions or orientations.

The MBTI directly addresses interactions between people, both those who share the same preferences and those who do not. Using MBTI information, leadership development focuses on raising energy and optimism by reframing the way leaders interpret difficulties arising from their differences with others. They can then adapt behaviour and communication styles to interact with others more effectively (Myers et al 2003). Choong and Britton (2007) found the MBTI type preferences to be significantly related to character strengths and moral values (also called signature or cognitive strengths) such as integrity, fairness, prudence, creativity, perspective, love of learning, love (caring), and open-mindedness.

3.2 Self-actualisation

Self-actualisation is a well-known concept in leadership; it is defined as a natural and dynamic life-long process of growth towards becoming what the person can become—someone who actualises all talents and potential in a full, clear, selfless experience, with full concentration and absorption, totally and fully human, a being with actuality and potentiality (Maslow 1970; Snyder & Lopez 2002). The concept is supported by various other positive psychology constructs such as maturity, the fully functioning person, and self-transcendence (Cilliers 2004).

Self-actualisation behaviours are operationalised in the Personal Orientation Inventory (POI) (Knapp 1990; Shostrom 1974) as the capability to use one's full potential, live in the present and have a benevolent outlook on life and human nature. Table 2 summarises the 12 POI scales.

3.3 Deep-seated values

The "emerging cyclical levels of existence theory" (also referred to as the spiral dynamics model) is based on Maslow's hierarchy of needs and self-actualisation theory (Beck 2001; Cacioppe & Edwards 2005; Cowan & Todorovic 2000; Pesut 2001; Wikipedia 2010 s.v. "spiral dynamics"; Todorovic 2000; Van Marrewijk 2004; 2005). The theory comments on the dynamics of psychological existence and the spiralling of human systems towards the understanding of organisational complexity, diversity, leadership, change, alignment and integration. The model explains how to move from old paradigms of survival, kinship, power, purpose, achievement and consensus orientations towards new paradigms of integration and holism.

Table 2
Self-actualisation

Scale description
Time competence (TC): Managing time - a purposeful and realistic orientation towards the present, perceiving past experiences and future expectations as part of a meaningful continuum versus less effective time management - idealistic expectations, fears, a primarily future-orientation.
Inner support (I): Acting autonomously - making decisions based on own motivation and internalised principles, transcending and integrating the extremes of self-directedness and other-directedness in an optimal balance, versus other-directedness - relying on others, being susceptible to external influences, seeking acceptance through manipulation, attempting to impress others from behind a mask.
Self-actualising values (SAV): Adhering to the primary values of self-actualising persons versus the rejection of these. *Existentialism (EX):* Behaving according to the demands of the situation (existentially), flexibility in the application of values, versus rigidly, compulsively, dogmatically adhering to principles.
Feeling reactivity (FR): Responsiveness, sensitivity towards own feelings and needs, versus lack of sensitivity. *Spontaneity (S):* Feeling free to act spontaneously, to be oneself versus a fear of doing so.
Self-regard (SR): Affirming the self positively in terms of own worth or personal strength versus feelings of low self-worth. *Self-acceptance (SA):* Accepting the self despite weaknesses or shortcomings, versus an inability to accept shortcomings.
Nature of man – constructive (NC): A constructive view of human beings - seeing people as essentially good, resolving dichotomies such as good/bad, masculinity/femininity, selfishness/unselfishness, versus seeing human beings as evil or bad. *Synergy (SY):* Achieving synergy by transcending dichotomies, to connect and integrate seeming opposites, understanding that work/play, selfishness/selflessness are not mutually exclusive, versus seeing opposites as antagonistic.
Acceptance of aggression (A): Accepting own natural anger and aggression as a voluntary response, versus defending (denying, repressing them). *Capacity for intimate contact (C):* Developing meaningful, close, genuine, spontaneous, honest, intimate relationships with others, without undue expectations/obligations, versus difficulty in establishing these.

Source: Adapted from Knapp (1990)

The spiral dynamics model operates by measuring different value systems, manifesting as a belief, deep-seated value, world view, psychological existence, organisational principle or mode of adjustment (Beck & Cowan 2003). The model represents a core intelligence that forms systems and directs human behaviour, impacts on all life choices as a decision-making framework, manifests in both healthy and unhealthy forms, acts as a discrete structure of thinking (not just a set of ideas, values or causes), and can *brighten and dim* as life conditions change (in terms of time, places, existential demands and societal circumstances). As such, it can be used to give different interpretations of organisational phenomena such as sustainability and responsibility. Table 3 summarises the six spiral dynamics scales (as measured by the Psychological Map) used in this research, indicated by their colour representation.

3.4 *Psychological profile: personality type, self-actualisation, and deep-seated values*

This research focused on the description of a psychological profile by analysing the relationship between leaders' personality type preferences, self-actualisation and deep-seated values in the selected sample. These behavioural constructs point to a broad psychological profile of intrapersonal awareness described as the self-actualising tendency (Cilliers 2004) and interpersonal awareness of style preferences with supporting intrapersonal characteristics (Leary et al 2008).

Table 3
Deep-seated values

COLOUR SYSTEM: *Deep-seated value system/behaviour*
BEIGE: *Semi-stone age*. Caretaker / provider; use biological senses (touch, taste, smell, seeing, hearing); use physical contact (rather than symbols); people migrate through experiences; *boundary management*: space is available to all / owned by none; *anxiety response*: retraction, denial; *leadership*: resignatory
RED: *Exploitative*. Raw power display; unconstrained; might makes right; unrestrained guilt; feared respect; do straight talking; what's in it for me; prefer immediate gratification; attention seeking; challenge with strength; prefer heroic status; act to-the-point, unambiguous, strong; use simple language / fierce images; struggles with the system; *boundary management*: shift according to used power where the big me leaves his/her personal mark; winning the conquest; the power god / feudal lord; decision making: the touch one dictates, what feels good is right; *anxiety response*: fighting, confrontation, get down and dirty; *leadership*: domination, keeping the split between the haves (the earned their status) and have-nots (the deserve poverty / have no right to complain)
BLUE: *Authoritarian*. Use rightful proper authority; follow the chain of command / according to rules / code of conduct; there is only one right way; moralistic; use positional power; take orders for authority; sacrifice for honour; do duty; prefer discipline; do right / obey rules; adhere to tradition; will self-sacrifice for higher cause / purpose; appeal to traditions / established norms; class conscious; one needs to know one's place, value propriety / righteousness / responsibility / delayed gratification; assuage guilt with correct consequences; purpose in the cause and guilt in the consequence; punish errors; *boundary management*: high power assigns different people to different lands; rightful places are properly surveyed, documented, fenced, defended as holy and permanent; find peace of mind / security / binding of anxiety in structure; *anxiety response*: flight into righteousness, demonise the enemy, deifying true patriots; *leadership*: reward duty / punish failure, everyone is part of a system fulfilling destined roles, no one has choice
ORANGE: *Entrepreneurial*. Follow one's right mind; advantageous to the self; materialistic; high expectations; life is based on proven experience; use competitive advantage / leverage; goal-oriented; competes for success; upward mobility; motivated by success / achievement; prefer the bigger / better / newer / faster / more popular; attention seeking; image conscious; display affluence; buy into society; impressed by experts / authority; leverage influence; use experiential / tried-and-true arguments; chase profit, productivity, quality, result, winning; *boundary management*: spheres of economic influence and individual ownership; limits are adjusted by imperialistic interest, negotiated contracts, economic and political alliances, diplomatic compromise, trade agreements; boundaries are shifted depending on contemporary power; *anxiety response*: retracts into the shadow, use underhanded tactics, blackmail / bribery, whatever it takes to win; *leadership*: motivate followers to compete for opportunity and rewards according to known ways as well as driving for more
GREEN: *Communitarian*. Everybody is equal; everything is relative; harmony amongst all; thrives on belonging; value consensual community norms, sharing, participation, collaboration; embrace belonging, sharing; sensitive to human issues; accept any input; sacrifice feels good; politically correct; caring for others; invest in the self; expand awareness and processing of all inner feelings; seek inner peace; constant renewal of spirituality; understand inner-self; use symbols of equity, humanity, bonding; use gentle language along with nature imagery; build trust / openness; use exploration; realness; authentic emotional display; *boundary management*: open to meet the needs of the people in a communal space and open caring; all humans are connected in one single family; sharing for the good of all; *anxiety response*: flight into rigidity, playing holier-than-thou, political correctness, arrogance, blaming; *leadership*: taking responsibility for everyone's well-being, motivate followers through acceptance, mutuality, sharing, participation, emotional support, avoiding hostility / aggression
YELLOW: *Systemic*. Integrative; intrigued by process; freedom to be; rarely fearful; life is learning; shifting roles; use any information source / relevant / useful data; integrative; non-rigid; resolve paradoxes; chaos is natural; change is inevitable; operate in both conscious / unconscious mind, highly principled; knowledge centred; disregard status / prestige; interactive; self-accessible; prefer functional / lean information without fluff; uses fact / feeling / instinct; uses big picture / total system / integration; connect data across fields for holistic view; adapt, mesh, blend, access, gather; do more with less; self-connecting to systems / others in useful way; use integrative power; competence; *boundary management*: depend on where the system is in the moment; different needs are legitimised as long as the boundary conflicts do not endanger the life of the system; some conflict between and among different levels is inherent and inevitable; *anxiety response*: objective / cognitive evaluation; *leadership*: followers are different in personality and competence, they enjoy doing what fits them naturally, they need full access to information, material, they need to change in and move through the organisation as a transitory state, they are motivated through learning and understanding (no payoffs / punishment)

Source: Adapted from Beck and Cowan (2003)

Despite the popularity and extensive use of measures of personality type, self-actualisation, and deep-seated values, there has been limited research on the possible

relationship between these variables in the leadership context, nationally and internationally. The literature contains reports on the relationship between self-actualisation and many forms of leadership (Jung & Sosik 2006). Research results show that self-actualising leaders facilitate extraordinary performance amongst followers (Conger & Kanungo1998). One very interesting finding is the high levels of responsibility, acceptance, duty, obligation, commitment and talent utilisation amongst self-actualising leaders (Benjamin & Looby 1998).

Torrington (2001) reported a positive relationship between the MBTI preferences extraversion (E) / intuition (N) and self-actualisation. The attributes of the various personality type preferences have been associated with transformational leadership qualities (Brown & Reilly 2009; De Charon 2003). Transformational leadership has been related to positive organisational outcomes such as financial performance, staff retention, productivity and empowering behaviour in the South African organisational context (Govender & Parumasur 2010; Herbst & Conradie 2011; Mendes & Stander 2011; Stander & Rothmann 2008). According to the classical work of Burns (1978), transformational leadership occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of inspiration, motivation, and morality (Burns 1978).

Awareness of personality type preferences enjoys considerable recognition in the international and national leadership development literature (Coetzee 2005; Garrety 2007; Leary et al 2008; Myers et al 2003; Pauw 2012). A key application is that it informs individuals regarding their innate cognitive preferences for interaction with others. Each preference dimension, together with its underlying facets, represents both opportunity and liability in a given situation. The usefulness of the MBTI lies in helping leaders to understand their innate preferred cognitive behavioural styles, strengths and weaknesses and how to develop and appropriately deploy effective behavioural repertoires in opposition to preferences (Brown & Reilly 2009).

Because effective leadership is based on and delivered through inborn, enduring personal differences, it seems logical that personality preferences measured by the widely used MBTI have the potential to illuminate or explain the important dispositional factors associated with self-actualisation and deep-seated values. When considering descriptions of components and elements of personality typology, self-actualisation and values, certain relationships seem to be implied, giving rise to the following hypothesis:

H1: *There is a significant and positive relationship between leaders' personality type preferences, self-actualisation and deep-seated values.*

South African research has indicated significant differences between males and females regarding their personality preferences (Myers et al 2003; Yiannakis & Taylor 2009). While culture may not relate to personality type (Kirby, Kendall & Barger 2007), South African research has shown that there are often differences in type distributions and the strength of facet preferences among various ethnic groups (Myers et al 2003; Yiannakis & Taylor 2009). No evidence could be found in the literature and in South African research indicating gender or race differences in terms of self-actualisation and core values. It is possible that the humanistic assumptions around similarity in Maslow's (1970) thinking may explain the lack of evidence of these differences.

These findings lead to the second and third hypotheses:

H2: Gender and ethnicity significantly predict leaders' personality type preferences, self-actualisation and deep-seated values.

H3: Males and females and blacks and whites will differ significantly regarding their personality type preferences, self-actualisation and deep-seated values.

4 Research methodology

4.1 *Research approach*

A cross-sectional quantitative survey design was used to achieve the research objective (Terre Blanche, Durrheim & Painter 2006).

4.2 *Participants*

A non-probability sample (Breverton & Millward 2004) consisting of 64 participants was used. The participants were from an international financial services organisation, functioning in junior leadership positions. Fifty were working in South Africa and 14 in West and East Africa; 59% were black (Africans 30%; coloureds 9%, Indians, 20%) and 41% white; 69% male and 31% female; 87% were between 25 and 40 years of age (early adulthood life/career stage); and 50% were functioning on manager and 50% on senior manager levels.

4.3 *Measuring instruments*

Three measuring instruments were used, one for each construct.

• *Myers-Briggs Type Indicator (MBTI) Form Q*

The MBTI Form Q (Myers & Myers 2003) measures the four MBTI preference pairs (E-I, S-N, T-F and J-P), as well as 20 facets. The MBTI Form Q assessment includes 144 items that measure dominant preference types and the facets underlying each of the four type preference dichotomies. The inclusion of the facets creates a richer and more detailed description of an individual's behaviour (Schaubhut 2008). The MBTI Form Q is a well-established instrument with proven validity and reliability as reported in the MBTI manual (Myers et al 2003). The reliability (internal consistency) coefficients of the MBTI Step II Form Q range from 0.87 to 0.91 (Yiannakis & Taylor 2009).

• *Personal Orientation Inventory (POI)*

The POI measures values and behaviour hypothesised to be important in the development of self-actualised individuals (Knapp 1990; Shostrom 1974). The POI consists of 150 items, paired as opposite (positive / self-actualising and negative / non-self-actualising) statements. Acceptable construct validity was reported over many years (Cilliers & Coetzee 2003; Knapp 1990; Shostrom, 1974). Test-retest reliability has been established with Cronbach's alphas of 0.71–0.77, 0.52–0.82 (Shostrom 1974), and in a South African study, 0.41–0.82 (Schulz 1994).

• *Psychological map (PM)*

The PM (Beck & Cowan undated) consists of 40 questions, to be rated *most like me* or *least like me*. The total *most like me* responses indicate an attachment (denoted by +) to the scale's behaviour and the total *least like me* responses indicate a detachment (denoted by -). As no relevant psychometric standardisation data were found in the literature, the reliability (internal consistency) coefficients were assessed. Cronbach's alpha coefficients of 0.60 and above are considered to be reliable (Hair, Black, Babin & Anderson 2010).

4.4 *Procedure*

The research procedure comprised the following. The MBTI, POI and PM were completed by all the participants within the same week. The MBTI Form Q was completed on-line and the POI and PM on hard copy. In terms of ethics, permission was obtained from the institution's Head of Group Human Resources. Informed consent was obtained from each participant in the sample; it was agreed that the data will be treated with confidentiality and be used for research purposes only. Data analysis procedures were chosen based on their applicability to the exploratory nature of the research design (Field 2005). Descriptive and inferential statistics, standard multiple regression analysis (H1 and H2) and tests for mean differences (H3) were calculated to test the research hypotheses. In adopting the 95% confidence interval, the hypotheses were considered significant for a p-value below or equal to 0.05. In terms of the multiple regression analyses, the collinearity statistics (variance inflation factor [VIF] and the Tolerance scores) were also considered although the goal was simply to assess whether the MBTI variables significantly predict the POI and PM variables, and whether gender and ethnicity significantly predict the MBTI, POI and PM variables.

5 Results

5.1 *Descriptive statistics*

Tables 4 and 5 display the means, standard deviations and Cronbach's alpha coefficients obtained for the variables. In terms of the MBTI, the sample was mostly represented by the ESTJ personality type (predominantly at manager/senior manager levels). The ENTP and ESTP psychological types were mostly dominant on the associate director level, and the ISTJ type was dominant on the director level. In terms of gender, males were mostly represented by ESTJ and ISTJ types and females by ESTJ types. Blacks were mostly represented by the ESTJ and ESTP types, while whites were predominantly represented by the ESTJ, ESTP, ENTJ and ENTP types. Feeling types were underrepresented in the total sample.

Table 4 shows that with regard to the extraversion-introversion subscale, the direction of the participants' preferences is clearly towards the extraversion facets, especially on the active (*M*=2.06; *SD*=1.97) and enthusiastic (*M*=2.25; *SD*=2.13) facets. The introversion facets, reflective (*M*=0.73; *SD*=1.20) and quiet (*M*=0.98; *SD*=1.41), obtained near midpoint scores. On the sensing-intuition subscale, the direction of the participants' preferences is clearly towards the sensing facets, experiential (*M*=2.13; *SD*=1.94), realistic (*M*=1.38; *SD*=1.68) and concrete (*M*=1.36; *SD*=1.54). The participants also show clear preferences towards the intuition facets, imaginative (*M*=1.23; *SD*=1.66), original (*M*=1.81; *SD*=1.61) and conceptual (*M*=1.11; *SD*=1.24).

On the thinking-feeling subscale, the direction of the participants' preferences is clearly towards the thinking facets, showing a strong preference for the reasonable (*M*=2.94; *SD*=1.72), logical (*M*=2.84; *SD*=1.88) and tough (*M*=2.55; *SD*=1.93) facets. The feeling facets all obtained near midpoint scores. On the judging-perceiving subscale, participants' mean scores are clearly in the direction of the judging facets. Except for the judging facet of early starting (*M*=1.56; *SD*=1.91), all the mean scores for the judging facets are above 2.00, indicating very clear preferences for these facets. Clear preferences are also indicated for the perceiving facets, pressure-prompted (*M*=1.59; *SD*=2.01) and open-ended (*M*=1.02; *SD*=1.43).

Table 4
Means and standard deviations - MBTI Form Q facets (N=64)

MBTI facet preferences	Mean (SD)	Mean (SD)	MBTI facet preferences
Extraversion			*Introversion*
Initiating (E)	1.95 (2.07)	1.33 (1.77)	Receiving (I)
Expressive (E)	1.78 (1.86)	1.11 (1.60)	Contained (I)
Gregarious (E)	1.33 (1.70)	1.33 (1.81)	Intimate (I)
Active (E)	2.06 (1.97)	0.73 (1.20)	Reflective (I)
Enthusiastic (E)	2.25 (2.13)	0.98 (1.41)	Quiet (I)
Sensing			*Intuitive*
Concrete (S)	1.36 (1.54)	1.06 (1.67)	Abstract (N)
Realistic (S)	1.38 (1.68)	1.23 (1.66)	Imaginative (N)
Practical (S)	0.98 (1.51)	1.11 (1.24)	Conceptual (N)
Experiential (S)	2.13 (1.94)	0.73 (1.23)	Theoretical (N)
Traditional (S)	0.75 (1.44)	1.81 (1.61)	Original (N)
Thinking			*Feeling*
Logical (T)	2.84 (1.88)	0.31 (0.71)	Empathetic (F)
Reasonable (T)	2.94 (1.72)	0.31 (0.94)	Compassionate (F)
Questioning (T)	1.56 (1.32)	0.75 (1.26)	Accommodating (F)
Critical (T)	1.28 (1.35)	0.88 (1.33)	Accepting (F)
Tough (T)	2.55 (1.93)	0.42 (1.02)	Tender (F)
Judging			*Perceiving*
Systematic (J)	2.92 (2.09)	0.64 (1.26)	Casual (P)
Planful (J)	2.72 (2.19)	1.02 (1.43)	Open-ended (P)
Early starting (J)	1.56 (1.91)	1.59 (2.01)	Pressure-prompted (P)
Scheduled (J)	2.75 (2.23)	0.75 (1.30)	Spontaneous (P)
Methodical (J)	3.17 (1.92)	0.55 (1.25)	Emergent (P)

In terms of the POI, Table 5 shows that participants obtained overall low scores on self-actualisation. The highest scores were self-actualising value (*M*=20.83; *SD*=2.57) and self-regard (*M*=12.91*; SD*=2.15) and the lowest self-acceptance (*M*=12.81; *SD*=3.14) and existentialism (*M*=16.86; *SD*=4.07).

In terms of the PM, Table 5 shows that participants attached most strongly to the values represented by blue (*M*=6.78; *SD*=5.34), orange (*M*=6.28; *SD*=5.51) and green (*M*=5.20; *SD*=4.59), and detached from beige (*M*=10.14; *SD*=6.71), red (*M*=9.56; *SD*=6.61) and yellow (*M*=7.19; *SD*=5.84).

Table 5
Descriptive statistics: POI &PM (N=64)

Scale	Mean	SD	Cronbach's alpha coefficient
Personal Orientation Inventory (items in brackets)			*0.87 (overall)*
Time ratio (TC) (23)	15.75	2.78	0.84
Support ratio (I) (125)	79.52	9.75	0.85
Self-actualising values (SAV) (26)	20.83	2.57	0.84
Existentialism (EX) (32)	16.86	4.07	0.82
Feeling reactivity (FR) (23)	15.16	2.57	0.83
Spontaneity (S) (18)	12.50	2.29	0.83
Self-regard (SR) (16)	12.91	2.15	0.84

Scale	Mean	SD	Cronbach's alpha coefficient
Self-acceptance (SA) (26)	12.81	3.14	0.83
Nature of man—constructive (NC) (16)	11.63	1.77	0.85
Synergy (SY) (9)	7.20	1.25	0.85
Acceptance of aggression (A) (25)	16.20	2.93	0.83
Capacity for intimate contact (C) (28)	17.52	3.43	0.82
Psychological Map			*0.87 (overall)*
Beige positive (BE+) (30)	0.69	1.32	0.86
Beige negative (BE-) (30)	10.14	6.71	0.83
Red positive (RE+) (30)	1.48	2.45	0.86
Red negative (RE-) (30)	9.56	6.61	0.84
Blue positive (BL+) (30)	6.78	5.34	0.84
Blue negative (BL-) (30)	1.59	2.16	0.85
Orange positive (OR+) (30)	6.28	5.51	0.84
Orange negative (OR-) (30)	2.97	2.89	0.84
Green positive (GR+) (30)	5.20	4.59	0.85
Green negative (GR-) (30)	1.58	2.39	0.85
Yellow positive (YE+) (30)	1.81	2.12	0.85
Yellow negative (YE-) (30)	7.19	5.84	0.83

5.2 Hypothesis testing

The first two hypotheses (denoted H1 and H2) were tested by employing the standard multiple regression method; the results are reported in Tables 6 and 7.

Table 6
Multiple regression analyses: MBTI Form Q Facets & Preferences – POI &PM (N=64)

MBTI Facets	Personal Orientation Inventory (POI)						Psychological Map (PM)				
	SAV	EX	FR	A	C	NC	BE+	RE-	BL+	GR-	YE-
	β	β	β	β	β	β	β	β	β	β	β
Extraversion-Introversion											
Receiving (I)						0.74**					
Intimate (I)			0.65*		0.62*	-0.64*					
Reflective (I)										-0.69*	
Enthusiastic (E)										0.70**	
Quiet (I)										0.52*	
Sensing-Intuition											
Abstract (N)						0.55*		0.76**			
Concrete (S)								0.71*			
Imaginative (N)		0.54*									
Conceptual (N)		-0.39*									
Practical (S)								-0.54*			
Theoretical (N)		0.41*									
Original (N)					0.57*						
Traditional (S)							0.38*				
Thinking-Feeling											
Logical (T)			0.55*		0.60*						
Accepting (F)		0.76***									
Critical (T)		0.64**			0.56*						
Tough (T)		0.42*					-0.50*				

continued/

Judging-Perceiving											
Casual (P)								-0.56*			
Systematic (J)		-0.60*				-0.60*					
Planful (J)										-1.04*	
Spontaneous (P)		-0.49**						-0.44			
Scheduled (J)		-0.73**				-0.67*					
Early starting (J)			-0.49*								
Emergent (P)		-0.52*				0.77**					
Methodical (J)						0.88**					
MBTI Preferences											
N (Intuition)				0.25*					-0.29*		-0.47
F (Feeling)	-0.25*										
P (Perceiving)	0.36**							-0.32*	-0.29*		
F	4.30**	2.88**	1.93*	2.44*	2.01*	1.86*	2.02*	2.19*	4.37**	2.07*	4.10**
Adjusted *R²*	0.17++	0.54+++	0.37+++	0.08+	0.39+++	0.35+++	0.39+++	0.43+++	0.18++	0.40+++	0.17++

***p≤0.001; **p≤0.01; *p≤0.05; + R^2 ≤0.12 (small practical effect size); ++ R^2 ≥0.13≤0.25 (medium practical effect size); +++R^2 ≥0.26 (large practical effect size)

SAV: Self-actualising value; EX: Existentialism; FR: Feeling reactivity; A: Acceptance of aggression; C: Capacity for intimate contact; NC: Nature of man-constructive; BE+: Beige positive; RE-: Red negative; BL+: Blue positive; GE-: Green negative; YE-: Yellow negative

Table 7
Multiple regression analyses: MBTI Form Q Facets & Preferences,
POI & PM – Gender & Ethnicity (N=64)

MBTI facets	GENDER			ETHNICITY		
	β	F	Adjusted *R²*	*β*	F	Adjusted *R²*
Sensing-Intuition						
Experiential (S)				-0.35**	3.17*	0.09+
Judging-Perceiving						
Systematic (J)				-0.40***	4.72**	0.15++
Open-ended (P)				0.36**	3.10*	0.09+
Planful (J)				-0.42***	4.72**	0.19++
Pressure-prompted (P)				0.45***	6.72***	0.25++
Spontaneous (P)				0.34**	2.80*	0.08+
Scheduled (J)				-0.40***	4.07**	0.13++
Emergent (P)	-0.32**	4.80**	0.16++	0.36***	4.80**	0.16++
Methodical (J)				-0.42***	5.62**	0.18++
Personal Orientation Inventory						
Self-actualising values (SAV)				0.42***	5.60**	0.18++
Feeling reactivity (FR)	0.31**	5.03**	0.16++	0.29**	5.03**	0.16++
Psychological Map						
RE-				-0.38**	4.06**	0.13++
BL+				-0.27*	2.82*	0.08+
GR+				-0.34	3.51*	0.10+

***p≤0.001 **p≤0.01 *p≤0.05; + R^2 ≤0.12 (small practical effect size); ++ R^2 ≥0.13≤0.25 (medium practical effect size); +++R^2 ≥0.26 (large practical effect size)

RE-: Red negative; BL+: Blue positive; GE+: Green positive

The third hypothesis (H3) was analysed by testing for significant mean differences between the gender and ethnic variables, which were indicated as significant predictors of the MBTI, POI and PM variables by the multiple regression analyses. The results are reported in Table 8.

5.3 *Multiple regression analysis*

An examination of the tolerance and VIF values of the multiple regression models showed that all VIFs were equal to or lower than 1.20 and the tolerance values greater than or equal to 0.80. It was therefore concluded that multicollinearity was not a particular concern in the context of the present study and that the Beta (β) values could be interpreted with more confidence (Field 2005).

Table 6 shows that the MBTI facet variables significantly predict ($p \leq 0.05$) five of the POI variables: existentialism, feeling reactivity, nature of man—constructive, acceptance of aggression, and capacity for intimate contact. The percentages of variance explained by the regression models range from $R^2=0.35\%$ to $R^2=0.54\%$ (large practical effect size) (Cohen 1992). In terms of the PM variables, Table 6 shows that the MBTI facets significantly predict only the beige (+), red (-), blue (+), green (-) and yellow (+). The percentages of variance explained by the regression models range from $R^2=0.39\%$ to $R^2=0.43\%$ (large practical effect size) (Cohen 1992).

Table 7 shows that gender significantly predicts the MBTI judging facet emergent and the POI variable feeling reactivity. As indicated in Table 7, ethnicity significantly predicts the MBTI sensing facet experiential and also significantly predicts most of the judging-perceiving facets. Ethnicity significantly predicts only the POI self-actualising values and feeling reactivity variables and the PM red (-), blue (+) and green (+) variables. The percentages of variance explained by the regression models range from $R^2=0.09\%$ (small practical effect size) to $R^2=0.19\%$ (medium practical effect size) (Cohen 1992).

The results provide useful pointers regarding the manifested psychological profile that emerged from the relationship between the variables of concern to the present study. Overall, it was decided that the statistical results corroborate *H1* and *H2*.

5.4 *Test for significant mean differences*

The results of the tests for significant mean differences (Mann-Whitney-U and chi-square tests) are shown in Table 8.

In terms of the POI, females scored significantly higher than males on the feeling reactivity variable. No significant differences were observed between males and females on the PM variables. Males scored significantly higher than their female counterparts on the MBTI perceiving emergent facet. Whites scored significantly higher than their black counterparts on the POI self-actualising values and feeling reactivity. The blacks scored significantly higher than the whites on the PM red (-), blue (+) and green (+) variables. Blacks scored significantly higher than their white counterparts on the MBTI judging preferences, especially the systematic, planful and methodical facets. The whites scored significantly higher on the perceiving preference, especially the open-ended, spontaneous and emergent facets. The blacks also scored significantly higher on the sensing facet experiential.

Overall, it was decided that the statistical results corroborate *H3*.

GENDER	Means	Mann-Whitney U	z	Sig
MBTI Step II facets				
Emergent	Male (N=44): 0.77 Female (N= 20):0.05	317.50	-2.39	0.02*
POI				
Feeling reactivity (FR)	Male (N=44): 14.59 Female (N= 20):0.05	287.00	-2.24	0.03*
RACE	**Means**	**Chi-square**	**df**	**Sig**
MBTI Step II facets				
Experiential	Black (N = 38): 2.71 White (N = 26): 1.27	10.18	3	0.02*
Casual	Black (N = 38):0.37 White (N = 26):1.04	7.49	3	0.05*
Systematic	Black (N = 38):3.39 White (N = 26):2.23	15.35	3	0.002**
Open-ended	Black (N = 38):0.63 White (N = 26):1.58	9.49	3	0.02*
Planful	Black (N = 38):3.29 White (N = 26):1.88	11.18	3	0.01*
Pressure prompted	Black (N = 38):1.08 White (N = 26):2.35	11.17	3	0.01*
Spontaneous	Black (N = 38):0.47 White (N = 26):1.15	11.41	3	0.01*
Scheduled	Black (N = 38):3.32 White (N = 26):1.92	14.07	3	0.003**
Emergent	Black (N = 38): 0.29 White (N = 26):0.92	9.26	3	0.03*
Methodical	Black (N = 38):3.63 White (N = 26): 2.50	10.86	3	0.01**
POI				
Self-actualising values (SAV)	Black (N = 38):19.37 White (N = 26): 22.00	10.47	3	0.02*
Feeling reactivity (FR)	Black (N = 38):13.95 White (N = 26): 15.88	8.84	3	0.03*
PM				
RE-	Black (N = 38):12.37 White (N = 26): 6.46	10.86	3	0.01**
BL+	Black (N = 38):8.32 White (N = 26): 4.54	8.16	3	0.04*
GR+	Black (N = 38):7.26 White (N = 26): 3.27	8.15	3	0.04*

***p≤0.001; **p≤0.01 *p≤0.05

RE-: Red negative; BL+: Blue positive; GE+ Green positive

6   Discussion

The psychological profile of leaders emanating from the relationships found between the variables of concern to this study indicated that the dominant personality type of the total sample was ESTJ; their self-actualisation was predominantly characterised by

self-actualising values and self-regard and their deep-seated values showed an attachment to authoritarian, entrepreneurial and communication behaviours. The psychological profile that emerged from the descriptive, multiple regression analyses and tests for significant mean differences analyses revealed interesting relationships between the variables measured and differences between the gender and ethnicity groups.

6.1 *Personality type profile*

The observed ESTJ profile of the participants is in accordance with findings reported by Myers and Myers (1995), and South African research by Yiannakis and Taylor (2009), which indicates that Western-based and African-based civilisations tend to socialise both men and women towards the extraversion, sensing and judging preferences. In terms of effective leadership, the strength indicated by the ESTJ profile of this group of leaders is their outgoing nature as reflected in their preference for active and enthusiastic involvement with others. The STJ personality types tend to value efficiency, practicality and cost-effectiveness in the use of resources and are actively focused on dealing with immediate concerns by taking responsibility for hands-on involvement in matters needing attention. The strong thinking-judging preferences suggest a focus on creating logical order and structures in the organisation and its processes and on achieving organisational goals. These preferences typically suggest an aptitude for analysing and solving problems, and making and implementing decisions quickly and with confidence. The STJ preference types are regarded as custodians or stewards of the organisational system who value following established methods and procedures and setting clear boundaries and rules for others. They tend to set high standards for themselves and others and value competence (Myers et al 2003).

These strengths are in line with indications in the literature (Nohria & Khurana 2010; Gardner, Avolio & Walumbwa 2005) that effective and responsible leaders should understand themselves as custodians of social, moral and environmental values and resources. Leader should protect and, whenever possible, enrich whatever they are entrusted with, in business and otherwise. Being more averse to change, ESTJ leaders (as custodians of valued practices and traditions) may tend to exhibit a strong normative values base which is important in times of change to help them to assess how much and what kind of change is truly necessary to ensure long-term sustainability. The strengths of the ESTJ profile are also in line with the leader's role of architect (Northouse 2004). The leader as an architect is able to deal with the challenge of building an inclusive integrity culture. Such leaders actively implement and support a moral infrastructure (policies, guidelines, business principles and audits). They assure fairness, respect, honesty and tolerance in the implementation of human resource management systems (policies and procedures), the monitoring of the bottom-line and the realisation of the shared vision and common business objectives (Johnson 2001).

However, the ESTJ leader may tend to give less attention and energy to, and therefore be less skilled in, behaviours that contribute to effective leadership outcomes. According to Myers et al (2003), some of the weaknesses in leadership associated with Thinking-Judging are that these preference types tend to create logical structures that unintentionally limit others' flexibility, creativity and perspectives. They may tend to emphasise efficiency over inclusion and consultation and fail to involve others in analysis and decision-making. They may move so quickly to decisions that they do not allow the amount of process time others need or they may act before they have gathered enough information. They may place such value on their own high standards

that they fail to recognise alternative standards and positive contributions that are different from theirs. They may also tend to be rigid and inflexible and not be comfortable with rapid and large-scale change or the development of radically innovative new products or services. They may also mistrust individuals who do not conform to the rules or the norm. Other potential weaknesses associated with the thinking preference include avoidance of interpersonal issues, ignoring the feelings of others, suppressing own feelings, and focusing on persuasion during conflict rather than seeking compromise (De Charon 2003).

Bass and Riggio (2006) assert in this regard that leaders should act as visionaries to ensure sustainable business success, that is, they should be able to envision a desired future that appeals to followers as stakeholders and that gives them direction. They should respect, be attentive to and care for the needs and interests of others. In their role as servant leader (Northouse 2004), leaders should have a high degree of interpersonal effectiveness characterised by (firstly) their sensitivity towards their own needs and feelings, followed by the same towards their followers. Effective leaders adopt an ethics of caring for the well-being of their followers. As the coach, the leader supports the relational process and fosters collaborative interaction, facilitates development, enables learning, and supports individuals and teams in realising a common vision and achieving objectives.

6.2 *Self-actualisation profile*

The observed profile of the participants indicates a general low level of self-actualisation behaviour (Rice 2010). The participants seem to have a cognitive belief in the values of self-actualising people and have a relative level of self-regard. This indicates that their values are driven by the need to self-actualise and that they do that with a strong sense of self-worth. On the other hand, they show a strong rigidity and seem to find it difficult to be flexible in the application of their values, to accept themselves in spite of their human weaknesses, and to live in the here-and-now (they appear to focus more on the past and future as a flight response). The remaining self-actualisation behaviours are below average. Two conflicts manifest in their profile (Knapp 1990): (1) In terms of valuing, they seem to accept the self-actualisation values described in humanistic thinking, yet appear to *freeze* into rigidity when it comes to the application of these values in a practical situation. This can also be interpreted as a defence mechanism against *practising what you preach*/*putting your money where your mouth is*. (2) In terms of self-perception, their high level of self-regard is in conflict with their low level of self-acceptance. When functioning on their own, they seem to feel worthy, yet when they are challenged by who they really are in terms of opposites they appear to identify more with their strengths and deny their own weaknesses. This indicates that they have difficulty with the integration of the opposites in behaviour or in life (a core component of synergism in self-actualisation).

The above self-actualisation profile is in conflict with the assertion in the literature (Avolio & Locke 2002; Luthans 2002) that effective leaders are able to understand themselves and enjoy effective interpersonal relationships in their roles as servant leaders, coaches, story tellers and enablers. The profile does not illustrate the desired emotional sensitivity towards the self as a point of departure towards emotional intelligence—sensitivity towards the needs and feelings of others (Snyder & Lopez 2002). Rather, the profile suggests possible difficulty in adopting the ethics of caring for the well-being of their followers—especially if the behaviour requires emotional sensitivity (Rice 2010).

6.3 *Deep-seated values profile*

The observed spiral dynamics (PM) profile of the participants indicates an attachment to authoritarian (focusing on group values while enforcing the traditional, the rule, the moral), entrepreneurial (focusing on the self and being in competition with others) and communication (focusing on group values of equality, sharing, acceptance, avoidance of hostility) behaviours. They appear to detach from caretaking, exploitative and systemic behaviours (Van Marrewijk 2004; 2005). Of these three, their apparent detachment from the systemic values (yellow) is concerning. It implies that they may tend to avoid the integrative, process-oriented acceptance of differences and coping with the demands of paradoxes, as stipulated in transformational leadership (Nohria & Khurana 2010). Regarding Maak and Pless's (2006) reference to responsible leadership, the deep-seated values profile suggests that this sample of leaders do not demonstrate the desired behaviours related to the steward, visionary, servant, coach, meaning enabler or change agent. They might at best focus on the task with a strong undertone of self-interest, and focus little on their colleagues' experiences and emotional experiences.

6.4 *Personality type and self-actualisation profile*

The results suggest that the participants' personality type preferences significantly predicted or explained their self-actualisation. Participants with a preference for making decisions more subjectively, that is, based on personal values, are less inclined to live in accordance with the values that are reflected in self-actualising behaviour. Participants who prefer a flexible and spontaneous approach to life and feel comfortable in dealing with ambiguity tend to live in accordance with the values reflected in self-actualising behaviour. Those participants who prefer to use their imagination to focus on a range of other and future possibilities seem to have a strong ability to accept their personal feelings of anger or aggression as natural or as a voluntary response to situations, people or events. South African-based leadership research by Coetzee (2005) and Pauw (2012) revealed that leaders of the intuitive perceiving type tend to have high levels of emotional intelligence.

Participants who are highly responsive or sensitive towards their personal feelings and needs are more introverted, with a preference for close, intimate, one-on-one and in-depth involvement with a few significant others rather than large groups of people (Myers et al 2003). On the other hand, participants who prefer to deal with deadlines and time pressures (by starting ahead of time and arranging their world so they do not have to deal with last-minute scrambles) seem to be less sensitive to their own feelings and needs. It appears that participants' preference for completing the task at hand tends to become more important than their personal feelings and needs (Myers et al 2003).

Participants with a preference for intimacy also seem to have a strong capacity to develop meaningful intimate relationships with others without feelings of undue expectations and obligations. High feeling reactivity and the capacity to establish meaningful, close and honest interpersonal relationships were also observed in participants who believe that following a dispassionate approach and performing logical analysis by analysing cause and effect and the pros and cons of a situation constitute the best decision-making method. These findings are in agreement with research by Pauw (2012), who found a significant association between the extraversion and introversion type preferences and leaders' ability to effectively manage interpersonal relationships in the South African asset management context. Contrary to research by Pauw (2012), participants who prefer a critical approach when dealing with differences

also seem to have a strong capacity for establishing meaningful interpersonal relationships.

Intuitive-type participants who are future-oriented, trust theory, use their imagination to envision what they believe is needed for the future, and deal resourcefully with new and unusual experiences seem to have high levels of existentialism, that is, they seem to be highly flexible in applying personal values that allow them to behave in accordance with the demands of the situation. Pauw (2012) found that intuitive (N) types tend to have high levels of change resilience. When dealing with their personal differences with others, those participants who are either Feeling-type or accepting (focusing on the good in people and situations, being kind to others, praising and forgiving them and believing that a win-win situation is possible) or T-type/critical and sceptical (clarifying what is wrong in a situation and being tough in achieving their personal objectives) are also highly existential (flexible) in their approach. In this regard Pauw (2012) found no significant associations between the TF preferences and leaders' change resilience or flexibility.

On the other hand, iNtuitive-type participants who like being intellectually curious and acquiring new knowledge or ideas for their own sake seem inclined to be rigid and dogmatic in their adherence to values when dealing with the demands of a situation. Similarly, in line with research by Myers et al (2003), Judging-type participants who prefer an organised approach to life, work within a superstructure of efficiency, dislike diversions and surprises, prefer to control their time and follow established methods, procedures and routines seem to be more rigid and dogmatic in adhering to values required by the demands of a situation. Low levels of existentialism (rigidity in dealing with the demands of a situation) were also observed for P-type participants who prefer a spontaneous and emergent approach to their lives. It appears that their preference for taking an informal approach to life and completing tasks, and having the freedom to remain open to respond in the moment to new and unexpected opportunities (Myers et al 2003) leads to higher levels of rigidity and dogma in dealing with the demands of a situation that may be perceived as being overly confining to them. These findings are in line with research conducted by Myers et al (2003) on the preferences of J and P types.

The results show that introverted participants who are inclined to be receiving and shy away from social obligations when connecting and interacting with others tend to have a more constructive view of people, that is, they tend to see people as essentially good. On the other hand, introverted participants who are more intimate in their relationships with others tend to see people in a more negative light, which may explain their preference for relating to only a few significant others and drawing sharp distinctions between friends and acquaintances. Pauw (2012) found introverted types to be more effective in handling interpersonal relationships. Overall, these findings are in line with research by Myers et al (2003) on the introverted personality type.

Participants who appear to take a constructive view of their fellow human beings also seem to be more abstract in their thinking processes. They are more intuitive and tend to read between the lines and may prefer to use symbols and metaphors when explaining their views (Myers et al 2003). Perceiving-type participants who prefer both an emergent and a methodical approach also have a strongly constructive view of other people. Emergent-methodical people tend to be more trusting and confident in their own abilities. In familiar situations they usually believe that solutions will emerge regardless of where they start, and they will thoroughly prepare detailed plans when encountering unfamiliar situations and tasks (Myers et al 2003). On the other hand, participants who seem to prefer a more negative and distrustful view of others also

seem to prefer to be systematic and scheduled in their approach to task completion. They apparently prefer working within a superstructure of efficiency with contingency plans in place to ensure that they are thoroughly prepared. They also seem to dislike diversions and surprises, prefer to be in control of their lives, and are more comfortable with routines, established methods and procedures, both at work and at home. Overall, these findings are in line with research findings reported by Myers et al (2003) on the JP personality types.

6.5 *Personality type and deep-seated values profile*

The results suggest that some deep-seated values may be explained by the participants' personality type preferences. Sensing-type participants who identify strongly with the traditional or what is familiar, who support and admire established institutions and methods and who are reluctant to change things that are working well seem to relate strongly to the values rooted in the caretaking and providing mindset. On the other hand, Thinking-type participants who prefer a critical approach in dealing with interpersonal differences and a casual or more leisurely pace in living their lives seem to detach from the caring and providing mindset. These findings support those reported by Myers et al (2003) on the ST personality type preferences.

The results indicate that intuitive type participants who prefer abstract thinking in understanding the meaning of the larger context of a situation and sensing type participants who prefer to be grounded in the concreteness of reality and facts are more averse to the use of power to gain respect. On the other hand, sensing type participants who find the practical utility and application of ideas appealing and enjoy a more free, open, and spontaneous approach towards accomplishing goals tend to be less averse to the exploitative values. These findings support those reported by Myers et al (2003) on the NS personality type preferences.

In line with research by Pauw (2012), introverted type participants who prefer quiet and calm and enthusiastic extraverted types who like being where the action is seem to associate strongly with responsibility as a value and with caring for others' well-being. On the other hand, introverted types who are more reflective, prefer learning by reading and writing, and communicate better through writing than by talking, doing, hearing and observing seem to be less averse to systemic (yellow) values. Participants who seem to enjoy looking ahead and planning for the future by making long-range plans appear to be less detached from the humanistic values of taking responsibility and caring for others' development and motivation.

6.6 *Gender and ethnicity: Personality types, self-actualisation and deep-seated values profile*

The results revealed that gender significantly predicts or explains the emergent personality types and the feeling reactivity value. Contrary to previous South African research (Yiannakis & Taylor, 2009), males show a significantly higher preference for an informal approach to task completion than females. Females are significantly more sensitive towards their personal feelings and needs than males. These results correspond to South African research reported by Coetzee, Jansen and Muller (2009), which indicates that women tend to be more in touch with their feelings and better able to engage in emotional responses that help to ameliorate long-term negative stress consequences. Chan and Hui (1995) further found men to be more constrained in expressing their emotions than females. Gender did not significantly predict the spiral dynamic (PM) behaviours.

Ethnicity significantly predicted the sensing (experiential) and judging-perceiving facet preferences, with blacks scoring more toward the extreme end on the experiential facet, and appearing more extraverted on the judging facets systematic, planful, scheduled and methodical. Whites showed a significantly higher preference for the perceiving facets open-ended, pressure-prompted and emergent. These findings correspond to South African research on the MBTI preferences as reported by Yiannakis and Taylor (2009). Black participants seem to prefer a more organised approach to their lives and to task accomplishment. They appear to learn best from direct, hands-on experience and prefer focusing on the past and present (the immediate concerns of the day) rather than on the future. Black participants also indicate a stronger preference for being thoroughly prepared, developing detailed plans for accomplishing goals, working within clear boundaries and creating structures of efficiency. Long-range planning is preferred for personal goals and leisure activities. They seem to prefer being in control, sticking to a schedule and functioning within routines and established methods. White participants on the other hand indicate a stronger preference for being flexible and more open in their approach to life. They seem to follow a more informal and trusting approach in the accomplishment of tasks. White participants also seem to function best when under moderate pressure. Overall, these results are in line with research on the MBTI personality preferences in the South African organisational context (Myers et al 2003; Yiannakis & Taylor 2009).

Ethnicity differentiated significantly in self-actualising value and feeling reactivity, with the white group scoring higher on both. Thus, white participants show higher levels of living according to the values of self-actualisation as a Western philosophy and of being more in touch with their needs and feelings. In terms of spiral dynamics (PM), ethnicity revealed significant differences in the detachment from power values (the black participants showing a stronger detachment), and the attachment to authoritarian and communitarian values (again with the black participants showing a stronger attachment). These findings are in agreement with South African research (Watkins & Mauer 1994; Smit & Cronje 2002), which suggests that power values may have a greater tendency to manifest amongst white leaders and authoritarian and communitarian values a greater tendency to manifest amongst black leaders.

7 Conclusions and practical implications

The study explored the psychological profile of organisational leaders as manifested in the relationship between their personality type preferences, self-actualisation and deep-seated values. Overall, in line with previous South African research on the MBTI preferences and values of leaders, the results indicated one-sidedness towards the ESTJ personality preference, low levels of self-actualisation, and an attachment to authoritarian, entrepreneurial and communitarian behaviours. Self-actualisation was significantly predicted by their strong task-driven and controlling (Thinking-Judging) personality preference, communitarian behaviour was significantly predicted by their extraversion-introversion and planning (J) preferences. Self-actualising values as important behaviours of leaders did not manifest strongly.

The following were concluded in terms of the leaders' profile. Their cognitive preference is for solving problems through quick analysis and decision making to maintain a logical order of events. It is as if they have to hurry through the procedure to get the task done, so that they can "move on". This indicates an avoidance of critical and creative thinking, and possibly also an intellectual competition amongst colleagues. On the behavioural surface, they act with emotional confidence and a high self-regard.

On a deeper level they are emotionally rigid and inflexible, insensitive towards their own needs and feelings and appear emotionally distant. They tend to suppress their own feelings—maybe because these feelings are perceived as not acceptable, or they fear emotional feedback and/or attack. It is as if they need to keep up an appearance of strength and coping. They are motivationally driven by immediacy, efficiency, cost-effectiveness, practicality and goal achievement. They prefer to act within strict rules and boundaries as if the anxiety caused by the exception is unbearable. Interpersonally, they act in an active and enthusiastic manner. Their strong and hurried analytical cognitive style manifests as a competitive persuasion of the other person, which results in the exclusion of the other with feelings of being disrespected and isolated. The leaders tend to act in their own individual silos where their behaviour is driven by self-interest and the exclusion of the other as a resource for both problem solving and emotional support. It is as if there is difficulty in adopting an ethic of caring for the emotional well-being of the participants' followers. In terms of leadership type and style they focus on the cognitive and architectural aspects of leadership, supported by morality and integrity aspects, while denying the importance of visionary, change, servant and coaching leadership.

It is suggested that this organisation (and possibly other financial and similar organisations) use the above profile as the basis for future human resource endeavours, such as a qualitative analysis of corporate leadership culture. Next, the data could be used to structure leadership development (LDP). For example, LDP could focus on the development of emotional intelligence as part of self-actualisation. Such a programme could include strong inputs on facilitation, containment of self and other and coaching skills. Lastly, the profile could be used by top management in its endeavours to strategise towards having the leadership competence it needs for the next 5–10 years.

Integrating the behavioural measures of type preference and self-actualisation, it was concluded that these leaders' one-sided preference toward the ESTJ personality type facets does not facilitate the enhancement of their capabilities as self-actualising leaders. This is because of the absence of a balance between the sensing / intuitive and thinking / feeling styles of problem-solving and decision-making. Linking this conclusion to the biographical measures, this conclusion was found to be especially true of participants in the senior manager level positions (directors) and black leaders, who predominantly prefer sensing, thinking and judging.

Leaders should be made aware of their preferences. They need to know that preferences can and sometimes must change (even if this is situation-bound) in order to deal with the demands of the new world of work—well-developed, balanced functions facilitate transformational leadership behaviour which is regarded as an essential behavioural attribute in acting as a change agent and visionary leader (De Charon 2003). In an LDP as well as in leadership coaching leaders (especially senior and black leaders) could be exposed primarily to intuitive and feeling activities to develop these less manifesting preferences which are needed for transformational leadership.

It was concluded that these leaders might well have difficulty with visionary leadership, which includes systemic thinking and cognisance of transformation dynamics. It is suggested that these leaders should be exposed to developmental situations where they can integrate reason and intuition as one of the primary contributions of systems thinking (see Senge 1990). It is also suggested that the leadership fraternity in organisations such as this one should constantly remind itself that it needs intuition-based decisions and visionary leadership as necessary ingredients for defining the future during change and transformation (Lank & Lank 1995).

The suggestion is made that this group of young leaders should be strongly encouraged to rely less on sensing alone. Their transition from being managers to becoming idea and visionary leaders depends on how they can learn to balance their (strong) sensing and their (suppressed) intuitive capacity (see Badaracco 1998). The same applies to the fact that their (preferred) thinking style has overshadowed their (suppressed) capacity for feeling. Their relational intelligence will be enhanced through this awareness and practice, which is characterised by supportiveness, shared emotion, empathy and the ability to provide descriptive and interesting accounts of events, and communicate moral experience and shared systems of meaning (De Charon 2003).

The leaders have difficulty with the demands of transformational leadership (see Vinger & Cilliers 2006; Mendes & Stander 2011; Stander & Rothmann 2008—all research in the South African context). This form of leadership is embedded in the building and sustaining of effective relationships between leader and follower (Nohria & Khurana 2010; Podolny, Khurana & Hill-Popper 2005). On the basis of the psychological profile of this sample manifested above, it is suggested that the leaders focus on the following aspects: (1) balancing their high level of task leadership and comparatively lower level of people leadership (see Blake & McCanse 1995); (2) developing their own intrapersonal functioning (personal growth, emotional reactivity, mindfulness, spontaneity, flexibility in the application of personal values, self-respect, self-acceptance, internal locus of control (Rice 2010) as the pre-work towards their interpersonal (relationship building) characteristics (Nohria & Khurana 2010); (3) balancing their cognitive focus (based on the values of tradition, rules and enforcing high morals—*the what* of their interpersonal style)against their relational intelligence (making emotional connections, the preference for listening and attending to others' feelings, the facilitation of interpersonal and emotional intimacy through empathy, passion, agreeableness, tolerance, trust, praise and tenderness—*the how* of their interpersonal style) (Snyder & Lopez 2002).

The conclusion was drawn that the collective worldview of the participants as leaders could explain aspects of the manifesting leadership culture. Their measured deep-seated value orientation proved to be absolutist, relying on authority through law, externalist, individualist and meritocratic. The leaders' personal values were based on duty, obedience, loyalty, guilt, discipline, stability, personal esteem, satisfaction and reward for image. Their behaviour illustrated a need for stability, order, black and white truth, as well as self-achievement, success and competition. The research literature suggests that these values are linked to a mix of conflicting truths, win-win option-seeking and self-interest (Cacioppe & Edwards 2005; Marques 2010; Van Marrewijk 2004; 2005). It is suggested that the organisation's leadership fraternity think deeply about the narcissistic undertones amongst leaders and their effect on role-modelling and followership behaviour.

In terms of equity and fairness, the results commented on the sameness / difference narrative in diversity management (Motsoaledi & Cilliers 2012). Although all citizens are equal in terms of the law, there are diversities manifesting in their leadership profiles. Males seem to prefer a task focus and act with constraint of emotions while females illustrate more sensitivity towards feelings. Black managers illustrate more extraverted energy and prefer a scheduled, routine, controlled, organised and hands-on way of working—where boundaries are clear and anxiety can be contained. On the other hand, white managers prefer more flexibility, openness and informality. The results also shed light on the collective (black) versus the individualistic (white) social value system

discourse (Cilliers & May 2012). The white managers illustrated more self-actualisation behaviour, based on individuation and emotional sensitivity, than the black leaders did. It is suggested that the organisation's leadership fraternity think about the implications of the above for its diversity profile and strategy and about how strategy and future performance may be affected.

In terms of the psychological contract (Passmore, Peterson & Freire 2013), it is hypothesised that these leaders would find it difficult to manage and enter into a dialogue with their colleagues and followers on mutual expectations, organisational membership, affiliation and the building of trust in relationships. It is suggested that leaders should become aware of their strong preference for cognitive functioning, their tendency to show interest in the self first, to deny the importance or existence of affiliation and intimacy, and that the organisation should process the implications thereof and include the balancing of tasks and people in its training and development programmes.

To conclude, it can be posited that transformational leadership characteristics did not manifest among this group of leaders as one would expect in a large financial services organisation. In terms of relational intelligence, the leaders' overall profile consists of being strongly task driven (and less people oriented), interpersonally focused on intellectual functioning (and less interested in forming empathic and ethical relationships), intrapersonally lacking self-awareness, sensitivity and emotional reactivity, and being steered by values of governance and competition. In line with the reasoning of Meyer and Boninelli (2007), it could be concluded that the organisation's leadership (as reflected in the psychological profile that emerged from the sample of leaders that participated in this study) has to face the challenge of growing transformational leadership behaviours and values in future leadership development initiatives.

8 Limitations and further research

This was an initial study of the psychological profile of the organisational leader and was limited to a non-probability sample of participants employed in one financial services company. The sample was also relatively small. The findings therefore cannot be generalised to other occupational contexts. Furthermore, given the cross-sectional nature of the research design, this study can yield no findings on causation. Associations between the variables have been interpreted rather than established. These findings need to be replicated with broader samples across various occupational groups and economic sectors before more comprehensive conclusions can be drawn about the leader's profile in the financial services context.

The use of the Cronbach's alpha coefficient in determining the reliability of especially the PM instrument which has not been previously standardised in the South African context is regarded as another limitation. It is recommended that future studies consider the use of Exploratory Factor Analysis or another more robust measure of reliability. Confirmatory Factor Analysis (CFA) should also be considered as a means of evaluating the measurement models of the instruments used in the present study. On the basis of the results of the CFA, future studies could then use Structural Equation Modelling for testing research hypotheses regarding the effects of the MBTI, gender and ethnicity variables on the POI and PM variables with larger sample groups.

The sample consisted of leaders up to 40 years of age. According to Jung (1921/1959), self-actualisation (called individualisation) peaks around 65 years of age. It is suggested that future research should include leaders over the full age range. Such

a study could reflect on how leadership grows over time. The chosen psychometric battery was based on the way the leadership relationship is presently conceptualised, which excluded instruments on personality (such as the OPQ, 16PF, the Big5). It is suggested that future research include personality functioning and emotional intelligence (Goleman 2008), conceptualised from the perspective of positive psychology (Snyder & Lopez 2002) as variables to ascertain the nature of the leadership profile. The findings suggested that self-actualisation and the way it is linked to yellow values (the integration of good and bad behaviours—Rice 2010) theoretically connect to mindfulness and wakefulness as constructs (Marques 2010). Wakefulness is an essential leadership skill that is developed by an ongoing process of thinking, feeling, observing, experiencing, learning and unlearning things, thoughts, habits and behaviour that are misleading, unethical, irresponsible and that thwart the realisation of one's capabilities as a self-actualising responsible leader. It is suggested that future research should consider including this vivid construct.

In terms of research design, it is suggested that qualitative, psychodynamic and narrative studies amongst all leaders should be used, to derive further insights into the connection between personality preferences, self-actualisation and deep-seated values and behaviour and responsible leadership behaviour characteristics, competencies and roles. It is also suggested that the leadership competencies should be operationalised in a leadership development programme format. This could be based on experiential learning methods followed by individual coaching (McCall 2010).

The researchers trust that the present research has opened up an awareness of how the psychological attributes and values of organisational leaders may potentially influence their behaviour as leaders and has stimulated ideas for further research on effective and responsible leadership functioning.

List of references

Avolio, B. 2007. Promoting more integrative strategies for leadership theory building. *American Psychologist* 62(1):25-33.

Avolio, BJ & Locke, EE. 2002. Contrasting different philosophies of leader motivation: Altruism versus egoism. *Leadership Quarterly* 13:169-191.

Badaracco, JL. 1998. The discipline of building character. *Harvard Business Review* 76(2):114-124.

Bass, BM & Riggio, RE. 2006. *Transformational leadership*. Mahwah, NJ: Erlbaum.

Beck, D. 2001. Spiral dynamics integral: Spiral dynamics in the integral age. Available at: http://www.spiraldynamics.net (accessed March 2010).

Beck, DE & Cowan, CC. 2003. *Spiral dynamics: Mastering values, leadership and change: exploring the new science of memetics.* Cambridge: Blackwell.

Beck, DE & Cowan, CC. Undated. *The psychological map. A measurement of human values. Form A*. The National Values Center.

Benjamin, P & Looby, J. 1998. Defining the nature of spirituality in the context of Maslow's and Roger's theories. *Counseling and Values* 42(2):92-100.

Bennis, W. 2007. The challenges of leadership in the modern world. *American Psychologist* 62(1):2-5.

Blake, RR & McCanse, AA. 1995. *Leadership dilemmas – grid solutions.* Houston: Griff.

Breverton, P & Millward, L. 2004. *Organisational research methods. A guide for students and researchers*. London: Sage.

Brown, FW & Reilly, MD. 2009. The Myers-Briggs Type Indicator and transformational leadership. *Journal of Management Development* 28(10):916-932.

Burns, JM.1978. *Leadership*. New York: Harper & Row.

Cacioppe, R & Edwards, M. 2005. Seeking the Holy Grail of organizational development: A synthesis of integral theory, spiral dynamics, corporate transformational and action inquiry. *Leadership and Organisational Development Journal* 26(2):86-105.

Chan, DW & Hui, EKP. 1995. Burnout and coping among Chinese secondary school teachers in Hong Kong. *British Journal of Educational Psychology* 65:15-25.

Choong, S & Britton, K. 2007. Character strengths and type: Exploration and covariation. *International Coaching Psychology Review* 2(1):9-23.

Cilliers, F. 2004. A person-centered view of diversity in South Africa. *The Person-Centered Journal* 11(1-2):33-47.

Cilliers, F & Coetzee, S. 2003. The theoretical-empirical fit between three psychological wellness constructs: Sense of coherence, learned resourcefulness and self-actualization. *South African Journal of Labour Relations* 27(1):4-24.

Cilliers, F & May, MS. 2012. The director's roles in containing the Robben Island diversity experience (RIDE). *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde* 38(2). Available at: http://dx.doi.org/10.4102/sajip.v38i2.986 (accessed on 2 November 2012).

Coetzee, M, Jansen, CA & Muller, H. 2009. Stress, coping resources and personality types: An exploratory study of teachers. *Acta Academica* 41(3):168-200.

Coetzee, M. 2005. The relationship between personality preferences, self-esteem and emotional competence. Unpublished DLitt et Phil thesis, University of South Africa, Pretoria.

Cohen, J. 1992. Quantitative methods in psychology: A power primer. *Psychological Bulletin* 112(1):153-159.

Conger, JA & Kanungo, RN. 1998.*Charismatic leadership in organizations.* Thousand Oaks, CA: Sage.

Cowan, CC & Todorovic, N. 2000. Spiral dynamics: The layers of human values in strategy. *Strategy and Leadership* 28(1):1-4.

De Charon, L. 2003. A transformational leadership development program: Jungian psychological types in dynamic flux. *Organization Development Journal* 21(3):9-19.

Field, A. 2005. *Discovering statistics using SPSS.* London: Sage Publications.

Gardner, WL, Ovolio, BJ & Walumbwa, FO. 2005. *Origins, effects and development*. Amsterdam: Elsevier.

Garrety, K. 2007. Beyond ISTJ: A discourse-analytic study of the use of the Myers-Briggs Type Indicator as an organizational change device in an Australian industrial firm. *Asia Pacific Journal of Human Resources* 45(2):218-234.

Gibb, BL. 2003. Myths, legend, lore and cultural revolution. *Organization Development Journal* 21(3):103-113.

Goleman, D. 2008. *The new leaders: Transforming the art of leadership into the science of results*. London: Sphere.

Govender, P & Parumasur, SB. 2010. Evaluating the roles and competencies that are critical considerations for management development. *South African Journal of Industrial Psychology* 36(1):60-70.

Hair, JF, Black, WC, Babin, BJ & Anderson, RE. 2010. *Multivariate data analysis.* New York: Prentice-Hall.

Herbst, THH & Conradie, PDP. 2011. Leadership effectiveness in higher education: Managerial self-perceptions versus perceptions of others. *South African Journal of Industrial Psychology* 37(1):1-14.

Johnson, CR. 2001. *Meeting the ethical challenges of leadership*. Thousand Oaks: Sage.

Jung, CG. 1921/1959. *The basic writings of CG Jung.* New York: The Modern Library.

Jung, CG. 1923. *Psychological types: The psychology of individuation.* London: Kegan Paul.

Jung, CG. 1971. *Psychological types.* Princeton: Princeton University Press.

Jung, D & Sosik, JJ. 2006. Who are the spellbinders? Identifying personal attributes of character leaders. *Journal of Leadership and Organizational Studies* 12(4):12-26.

Kaiser, RB, Hogan, R & Craig, SB. 2008. Leadership and the fate of organisations. *American Psychologist* 63(2):96-110.

Kirby, L, Kendall, E & Barger, NJ. 2007. *Type and culture: Using the MBTI instrument in international applications.* Mountain View: Consulting Psychologists Press.

Knapp, R. 1990. *Handbook for the Personal Orientation Inventory.* San Diego: Edits.

Kummerow, JM & Quenk, NL. 2003. *Understanding your MBTI Step II results.* Mountain View: Consulting Psychologists Press.

Lank, AG & Lank, EA. 1995. Legitimizing the gutfeel: The role of intuition in business. *Journal of Managerial Psychology* 10(5):18-23.

Leary, MM, Reilly, MD & Brown, FW. 2008. A study of personality preferences and emotional intelligence. *Leadership & Organization Development Journal* 30(5): 421-434.

Luthans, F. 2002. The need for and meaning of positive organizational behaviour. *Journal of Organizational Behavior* 23:695-706.

Maak, T & Pless, NM. 2006. Responsible leadership in a stakeholder society: A relational perspective. *Journal of Business Ethics* 66:99-115.

Maak, T & Pless, NM. 2009. Business leaders as citizens of the world: Advancing humanism on a global scale. *Journal of Business Ethics* 88: 537-550.

Marques, JF. 2010. Awakened leaders: Who are they and why do we need them? *Development and Learning in Organizations* 24(2):7-10.

Maslow, AH. 1970. *Motivation and personality*. New York: Harper & Row.

McCall, M. 2010. Recasting leadership development. *Industrial and Organizational Psychology* 3:3-19.

Mendes, F & Stander, MW. 2011. Positive organisation: The role of leader behaviour in work engagement and retention. *South African Journal of Industrial Psychology* 37(1):29-41.

Meyer, T & Boninelli, I. 2007. *Conversations in leadership: South African perspectives.* Randburg: Knowres.

Motsoaledi, L & Cilliers, F. 2012.Executive coaching in diversity from the systems psychodynamic perspective. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde* 38(2). Available at: http://dx.doi.org/10.4102/sajip.v38i2.988 (accessed on 2 November 2012).

Myers, IB. 1998. *Introduction to Type: A description of the theory and applications of the Myers-Briggs Type Indicator*. Palo Alto: Consulting Psychologists.

Myers, IB & Myers, P. 1995. *Gifts differing: Understanding personality type.* Mountain View: Davies-Black.

Myers, PB & Myers, KD. 2003. *Myers-Briggs Type Indicator Step II (Form Q).*Palo Alto: Consulting Psychologists.

Myers, IB, McCaulley, MH, Quenk, NL & Hammer, AL. 2003. *MBTI Manual: A guide to the development and use of the Myers-Briggs Type Indicator*. Palo Alto: Consulting Psychologists.

Nohria, N & Khurana, R. 2010. *Handbook of leadership theory and practice.* Boston: Harvard Business Press.

Northouse, PG. 2004. *Leadership: Theory and practice*. Thousand Oaks: Sage.

Passmore, J, Peterson, DB & Freire, T. 2013. *The Wiley-Blackwell handbook of the psychology of coaching and mentoring*. Chichester: Wiley-Blackwell.

Pauw, D. 2012. *The influence of leaders' personality types and emotional intelligence on retention factors.* Unpublished master's dissertation. University of South Africa, Pretoria.

Pesut, D. 2001. Spiral dynamics: Leadership insights. *Nursing Outlook* 49(2):0070.

Podolny, J, Khurana, R & Hill-Popper, M. 2005. Revising the meaning of leadership. *Research in Organizational Behavior* 26:1-36.

Popper, M & Mayseless, O. 2007. The building blocks of leader development: A psychological conceptual framework. *Leadership & Organization Development Journal* 28(7):664-684.

Rice, KE. 2010. Self-actualization. Available at: http://www.integratedsociopsychology. net/self-actualisation.html (accessed on 10 March 2010).

Rogers, CR. 1982. *Freedom to learn for the 80's*.Columbus: Charles E. Merrill.

Schaubhut, NA. 2008. *Technical brief for the MBTI Form M and Form Q assessments.* Palo Alto: Consulting Psychologists.

Schulz, GM. 1994. Reliability and validity of the Personal Orientation Inventory in South Africa. Unpublished master's dissertation, University of South Africa, Pretoria.

Senge, PM. 1990. *The fifth discipline: The art and practice of the learning organization.* New York: Currency Doubleday.

Shostrom, EL. 1974. *Manual for the Personality Orientation Inventory*. San Diego: Edits.

Smit, PJ & Cronjé, GJ. 2002.*Management principles.* Cape Town: Juta.

Snyder, CR & Lopez, SJ. 2002. *Handbook of positive psychology.* New York: Oxford University Press.

Stander, MW & Rothmann, S. 2008. The relationship between leadership, job satisfaction and organisational commitment. *South African Journal of Human Resource Management* 7(3):7-13.

Stander, MW & Rothmann, S. 2010. Psychological empowerment, job insecurity and employee engagement. *South African Journal of Industrial Psychology* 36(1):43-50.

Terre Blanche, M, Durrheim, K & Painter, D. 2006. *Research in practice: Applied methods for the social sciences*. Cape Town: UCT Press.

Todorovic, CCC. 2000. Spiral dynamics: The layers of human values in strategy. *Strategy and Leadership* 28(1):4.

Torrington, A. 2001. Relationship between the Bar-On Emotional Quotient Inventory and the Myers-Briggs Type Indicator. *Technical Report #0018*. Toronto: Multi-Health Systems.

Tsai, M, Tsai, C & Wang, Y. 2011. A study on the relationship between leadership style, emotional intelligence, self-efficacy and organizational commitment: A case study of the banking industry in Taiwan. *African Journal of Business Management* 5(13): 5319-5329.

Van Marrewijk, M. 2004. A value-based approach to organizational types: Towards a coherent set of stakeholder-oriented management tools. *Journal of Business Ethics* 55(2):147-158.

Van Marrewijk, M. 2005. Multiple levels of decision-making: Ethical management in various business contexts. *International Journal of Management and Decision Making* 6(3):257-272.

Van Niekerk, A & May, M. 2012. Exploring how middle managers experience the impact of senior management on their integrity. *South African Journal of Labour Relations* 36(2):42-61.

Vinger, G & Cilliers, F. 2006. Effective transformational leadership behaviours for managing change. *South African Journal of Human Resource Management* 4(2): 1-9.

Watkins, ML & Mauer, KF. 1994. The performance of white and black managers in South Africa. *South African journal of Psychology* 24(2):78-85.

Wikipedia 2010, s.v. "spiral dynamics". Available at: http://en.wikipedia.org/wiki/Sprial_ dynamics (accessed on 10 March 2010).

Yiannakis, C & Taylor, N. 2009. *South African MBTI Form Q Data Supplement.* Johannesburg: Jopie van Rooyen.